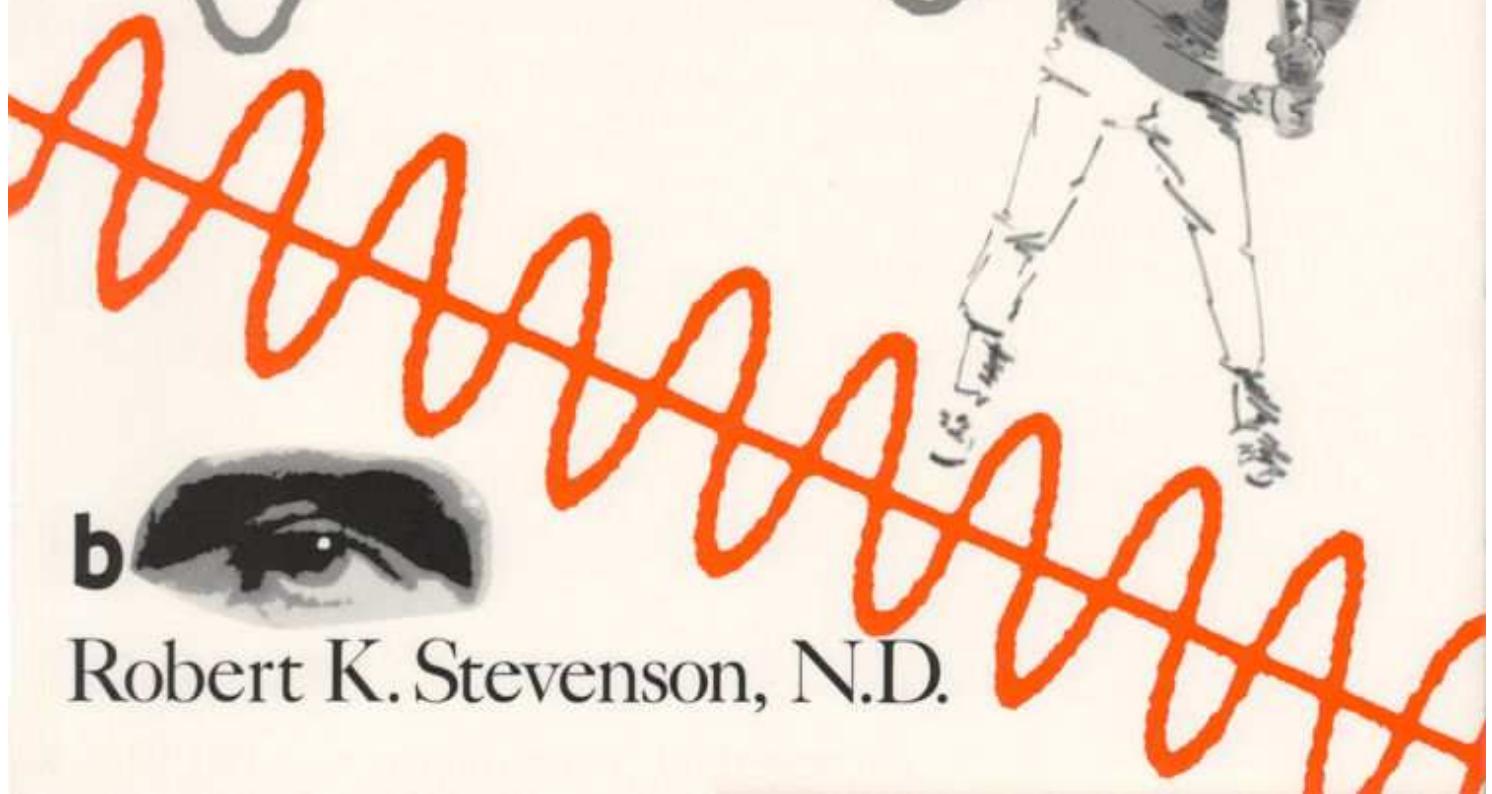


the
S U P E R
MENTAL TRAINING
BOOK



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Robert K. Stevenson, N.D.

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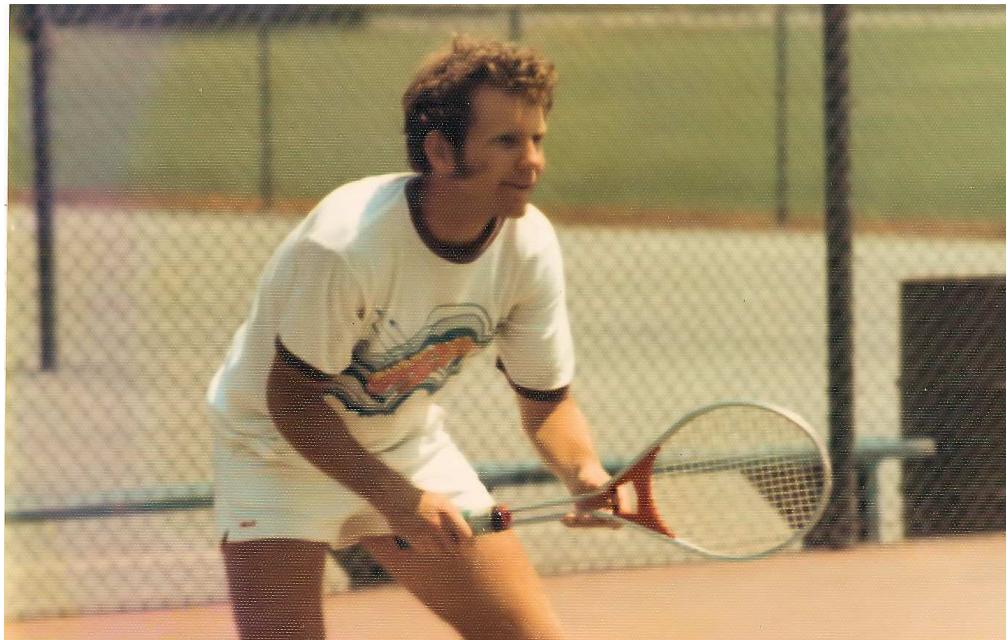
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About The Author

Robert K. Stevenson, N.D., researched *The Super Mental Training Book* for over 15 years. Formerly an elite level athlete himself, Dr. Stevenson talked to hundreds of sports champions and others to discover what mental training strategies worked and why. His findings, contained in this book, tell you all you need to know and do to become a consistent winner and achieve your full athletic potential.

THE SUPER MENTAL TRAINING BOOK

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FOREWORD

You are fortunate to have in your hands the most remarkable book ever written about mental training for athletes. As you no doubt desire to become the best you can be, let me tell you more about this brilliant masterpiece and the man responsible for it, so that you will better perceive the enormous benefits potentially in store for you by your continuing to read on.

I have known Dr. Robert K. "Bob" Stevenson for several years, and have followed with keen interest his progress in the creation of *The Super Mental Training Book*. Bob's self-appointed task can only be called monumental. His goals were to: (1) interview as many athletes, coaches, and sports psychologists as possible, learning first-hand what they are or are not doing in the area of mental training; (2) study any material—books, articles, audio and videotapes—dealing with mental training for athletes; (3) synthesize and organize this voluminous information so that readers of this book can choose from a variety of proven mental rehearsal techniques and strategies the ones they feel will prove helpful in their situation; and (4) critically examine mental training for athletes to show what conditions offer the best chances of success for the individual in given athletic events. These goals, as you will shortly see, were successfully achieved.

The Super Mental Training Book came about because Bob Stevenson possesses a unique background. He is, first of all, a competitive athlete in several sports. He has participated in the National Outdoor Racquetball Championships, California Handball Championships, dozens of tennis tournaments in the "Open" and "B" divisions, as well as many long-distance races and track meets. Dr. Stevenson played varsity tennis at California State University, Fullerton, and is the author of several books, including "The Golden Era of Preventive Medicine" and "Backwards Running." Of his four college degrees, his doctorate is in Naturopathy (the science of healing without drugs or surgery), and his Master's is in Social Science. He has had, in short, constant exposure to the athletic world, and this, combined with his expertise in health and psychology, has formed the foundation for *The Super Mental Training Book*. Applying his in-depth knowledge of mental rehearsal techniques, Dr. Stevenson taught self-hypnosis to more than 20 athletes during the mid-1970s. Most of them produced outstanding athletic performances while using self-hypnosis—some setting national records in the process. This positive outcome fueled the author's desire to write a mental training book to which professional and weekend athletes alike could turn for guidance and motivation. Dr. Stevenson reasoned that such a book needed to be more than an academic treatment of one mental rehearsal technique after another (what typically is encountered in other sports psychology type books). He believed that the reader would be most influenced by testimonials of known athletes. Certainly the words and stories of Jack Nicklaus, Wade Boggs, Martina Navratilova, and other sports champions, citing their successful experiences with mental training, would prove more useful and inspirational than any presentation of theoretical concepts. Furthermore, by bringing the experience of such stars into a personal frame of reference, it would let even the most casual athlete realize the potential of such techniques. This approach added years to Dr. Stevenson's project. The result is, however, what I believe to be a *magnificent* product of genius and perseverance.

I strongly recommend *The Super Mental Training Book* to anyone interested in active sports. You wish to improve, I'm sure. In this book you will learn how the application of various mental training strategies have brought championships, records, and greatness to many athletes. More important, though, is to learn how you yourself can profit from these easy-to-use methods. Once this realization is clear, act upon it. For your athletic performances, and life, will then attain a new level of accomplishment and satisfaction.

**Paul Scully-Power, D. Sc.
Space Shuttle Payload Specialist
Mission 41-G, October, 1984**

MENTAL TRAINING STRATEGIES TIME LINE

(INTRODUCTION)

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Attending Mental Training Workshops

(Few athletes and coaches do this, thereby allowing astute opponents who do participate in these to gain a mental edge come the competition; see Kurt Krueger's experience)

Being Your Own Mental Coach

(Dr. Kroger says that auto-suggestions are much more meaningful to a person than suggestions "given to him by someone else," such as a coach/sports psychologist)

Autosuggestions

(Should be done every day, and especially on the same day you compete, the suggestions being fresh and tailor-made; periodic reinforcement beneficial, says Dr. Kroger)

Mental Training Sessions

(Naruse taught 125 Japanese Olympians self-hypnosis, resulting in increased confidence and improved performances; the author promotes regular practice of self-hypnosis, visualization, or other mental disciplines of interest, estimating that 95% of all athletes do not engage in mental training; Dr. Kroger advocates 6 short self-hypnosis sessions per day; lactic acid level usually falls during mental training)

Avoidance of Drugs, Marijuana

(Hypnotist Pat Collins requires her students to stay off pot, having found that drug users rarely master self-hypnosis, because they do not practice; Dr. Reedy notes that Oakland Raiders who were "regular users were usually gone by the end of the year," their motivation having disintegrated; Cleveland Browns coach Sam Rutigliano saw drug-using players lose their discipline)

Applying the Instant Self-hypnosis Capability

(If necessary, one can give himself reinforcing autosuggestions during time outs and breaks in the action)

INTRODUCTION

Golf legend Jack Nicklaus says, “Form a positive picture in your mind of how the ball must behave to drop into the hole, then stick to your plan as you set up to and stroke the ball.” Meanwhile, another great golf champion, Tom Watson, declares that “the most important aspect of any shot is to visualize what you want to do before you address the ball and swing.” Ken Norton, former world heavyweight boxing champion, once observed, “By the time I get to the fight everything is embedded in my subconscious. Then, if an opportunity presents itself during the fight, it’s an automatic reflex.” Tennis’s Martina Navratilova informs us, “Especially if I’ve got a grudge match, or I want to prove something, win something big, I will go to sleep imagining what I am going to do. I try to envision the kind of points I want to be playing, the feeling of euphoria after the win, everything.” Men’s tennis champion, Ivan Lendl, by contrast, remarks that “I practice to music because it gives you rhythm and inspires you to play your best. I have speakers in the trees and on my practice court, and I seem to play my best matches when one of my favorite songs sticks in my mind.” One of baseball’s premiere hitters, George Brett, recalls what he did while recovering from an injury during the 1980 season: “I’d sit on the bench and visualize myself at the plate. I must have batted 600 times in my mind.”

What are all these sports superstars talking about? They are, of course, referring to mental training strategies—strategies which have helped each achieve his or her full athletic potential. Over the years many top athletes have used self-hypnosis, visualization, meditation, music, and other mental rehearsal techniques to dramatically improve their athletic performance. The resulting outstanding performances have often led to world records and championships. You read about the world records and money won by these athletes, but little is said about their mental training regimens. Yet, as far as most athletes are concerned, this is the story which should be reported. For the mass of evidence clearly indicates that self-hypnosis, visualization, and other mental disciplines can help the average athlete, top athlete—any athlete—achieve his potential; and realizing one’s full potential is the logical, ultimate goal.

In this book I am going to tell you about the mental training strategies used by scores of sports champions, including the Soviet Olympic athletes, and their successes (and occasional failures) while employing these techniques. I am going to report this behind-the-scenes story in greater detail than ever before attempted, noting at times the mistakes and blunders some have made in seeking mental training’s benefits. You will see that there are simple mental procedures you can easily learn and practice which will substantially improve your game, as well as help you in everyday life. Especially if you are a junior athlete, you can use these procedures to transform your emotional outbursts into precision victories; you will play with confidence and total concentration, and make things rough for your opponent. For coaches, the bottom line is that the mental techniques discussed here, when properly implemented, will enable your players to win more often.

You will learn that the “best” mental discipline is the one you feel most comfortable in practicing, and which generates the greatest positive results for you. Some athletes swear by self-hypnosis, some like visualization, others favor meditation, and so on. Every person is different, and possesses his own preferences and inclinations. So, choose from the dozens of mental procedures presented in this book one or more you feel might help you, and see what happens. Before you embark on this course of action, though, you might wish to profit from a clearer understanding of the role mental training now plays in sports. The balance of this chapter offers a useful context with which to view mental training, describes some of its features, and highlights an effective and powerful mental rehearsal technique.

Pioneering Work on the Use of Hypnosis by Athletes

In 1972, a book was published which has virtually gone unnoticed: *The Use of Hypnosis in Athletics*, by Dr. Wilfred M. Mitchell. The book is one of those pioneering efforts which contains virtues and deficiencies in equal measure. I shall not review all the book's contents, but will give you some idea of what it is about. Dr. Mitchell lists three purposes of his book: (1) "to bring into the open forum of public discussion" the topic of the use of hypnosis in athletics; (2) to report the findings of a survey Dr. Mitchell sent to high schools, junior colleges, colleges, and universities in the U.S. and Canada. The survey, conducted in 1969, mainly tried to determine how much and how often athletes in these schools used hypnosis; and (3) "to contribute an opening statement in the discussion of the use of hypnosis in athletics by approving its use when done *intelligently*." These purposes are laudable, but Dr. Mitchell's book hardly created a ripple. One major reason for this was that the book could be obtained only by ordering it from the Department of Psychology, University of the Pacific, an obscure marketing concern to say the least. It is not surprising, therefore, that hardly anyone knows the book exists.

Dr. Mitchell obtained his information from a questionnaire. He sent the form to 1641 colleges and universities across the country. A disappointing total of 422 schools replied. Of these only 76 reported instances where some of their athletes had used hypnosis. Furthermore, it is not known who filled out the questionnaire—the Athletic Director's secretary, a part-time coach, the athlete himself—we simply do not know. Obviously, it is important that affected athletes directly participate in any such questionnaire project.

It seems that the only *meaningful* way to reasonably estimate how many athletes use hypnosis, visualization, and similar mental rehearsal techniques, and how often they practice these techniques, is to talk to the athlete himself! No matter how perfectly designed, a questionnaire sent to an athletic department probably does not get any farther than the Athletic Director's secretary. Tracking down the athlete and talking to him does require a lot of effort, but it is by far the most rewarding way to research the subject.

For the last 15 years, I have talked to hundreds of athletes. The overwhelming majority of them have never used self-hypnosis, visualization, or other mental preparation procedures. However, I discovered quite a few who do. These athletes, forming the minority, besides telling me of their experiences with mental training, related several incredible stories that come out only through personal contact.

Dr. Mitchell's study uncovered 76 instances of athletes using hypnosis, but the names of these athletes who employed the technique were not given. If we do not know their names, we cannot confirm the facts. It is advisable therefore that we find athletes who are willing to *publicly* discuss their use of mental training strategies; and, I have found that if we approach *in person* athletes reported or rumored to use mental disciplines, most likely they will openly discuss their experiences. This direct approach proved truly helpful because whenever I had questions about certain details of a testimonial later on, I could go back to the athlete and doublecheck the actual situation.

I should mention that a few professional athletes would not speak to me about their mental training experiences, even though the information was already public knowledge (had been reported in newspapers and magazines). But, these closed mouths constituted less than a handful. Every other athlete I approached was willing and eager to tell his story. Bruce Ogilvie, a sports psychologist at San Jose State University, who has worked as a consultant for the Dallas Cowboys, Philadelphia '76ers, and several other professional sports teams, says that "athletes don't want people to know they've had shrinks in their lives. It's very dangerous to do that. There's the implication that you didn't do it all yourself and it could imply that you had some severe emotional problems."^[1] Again, contrary to what Dr. Ogilvie indicates, most of the athletes I

interviewed were not reluctant to discuss their mental training regimens and sessions with “shrinks.”

Number of Athletes “Into” Self-hypnosis, Visualization, and Other Mental Disciplines

How many athletes use self-hypnosis, visualization, meditation, or other mental training strategies? An actual number is really not possible to obtain. Based on my research, however, I estimate that no more than 5% of professional and amateur athletes regularly use any of these effective techniques. Even if 5% is an incorrect figure, it is not off by more than a factor of two and simply indicates that *too few* athletes engage in mental training to improve their athletic performance. As for the other 95%, they generally rely on haphazard traditional methods, such as the locker room pep talk, to prepare for competition. In fact, many athletes in this group do not even bother to “psych up.” This is understandable given: (1) the unreliability and ineffectiveness of haphazard methods, and (2) the superficial level of consciousness which these traditional methods address. At the elite athlete level mental training is becoming much more commonplace nowadays, but it still has not permeated to any great extent to the lower athletic ability levels. In certain quarters interest in mental training remains at historic lows. For instance, Dr. Kurt Krueger, a sports psychologist, conducted a Practical Sports Psychology Workshop at Orange Coast College in April, 1985. Dr. Krueger presented at his workshop ways for one to practice and teach such mental disciplines as visualization and meditation. The point behind learning such disciplines, according to the sports psychologist, is that “if you have techniques that you can consciously practice to get into a peak experience, then you can have a peak (athletic) performance more at will.”[2] No doubt Dr. Krueger’s workshop had a lot to offer, and it only cost \$25 to attend. Nonetheless just 10 people showed up for it. This is the type of situation one still encounters in searching for evidence of widespread or growing interest in mental training.

Naruse’s Scientific Study

Many scientific papers have been published about athletes employing self-hypnosis, or other mental disciplines, and experiencing an improvement in their performance. An example of these is Gosaku Naruse’s study, “The Hypnotic Treatment of Stage Fright in Champion Athletes” (see *International Journal of Clinical and Experimental Hypnosis*, April, 1965, Vol. VIII, Number 2, pp. 63-70). Naruse worked with “125 Japanese athletic champions who had returned to the country from the Rome Olympics in 1960.” His mission was “to utilize hypnosis for the therapeutic treatment of stage fright” in these athletes. He had been requested to do this by the Training Committee of the Japanese Society for Physical Culture. Naruse taught the athletes “self-training, a form of hypnosis” which he claims “had an excellent therapeutic effect on stage fright and the athlete’s confidence.” Later on in his paper, Naruse goes through individual case histories, a typical one being this:

Case G. Free pistol champion, 35 years old, male. He showed a great interest in the group learning autogenic training; but because of his intense concentration he had to be helped with heterohypnosis in order to experience heaviness and warmth.

(In one competition) he was too emotionally disturbed to achieve the sensation of heaviness and warmth. (He then) asked his trainer to come and stand behind him at the shooting position. He recovered his ability for self-control and relaxation and became calm. He performed wonderfully in the match. Afterwards he told the trainer that at that critical moment he felt as if he were hypnotized by the trainer, who suggested calmness and encouraged him to have self-confidence.

Naruse never reveals the identity of this free pistol champion, nor reveals the identities of all the other athletes to whom he taught his version of self-hypnosis. Of course, this is protocol in a scientific paper; but, while this might make for good science etiquette, it does not inspire the average athlete who chances upon Naruse's paper to try out hypnosis. "Free pistol champion" is simply too vague. So, if we are ever going to deliver an effective message to athletes about the benefits of self-hypnosis, visualization, and the like, we must be as specific as possible. In this book I will be as specific as possible.

Appropriateness of Self-hypnosis, Visualization, and Meditation

Before I describe some of the characteristics of the various mental disciplines athletes use, let me address certain questions I have been asked. First of all, it is legal in every state in the U.S. for you to learn and practice self-hypnosis, visualization, meditation, and similar mental rehearsal techniques on your own. Generally speaking, you will also be violating no laws if, for instance, you hypnotize a fellow athlete for the purpose of helping him play better. There is one state, Kansas, which has an outdated statute on the books that possibly forbids this. According to Robert A. Romanoff, the Kansas law states that "to allow oneself to be hypnotized can result in up to thirty days in jail and/or a fine not exceeding \$500."^[3] But, this type of law is highly unusual. It is only when you start charging money for hypnotizing others, or use hypnosis and related mental disciplines in a way that might be construed as the practice of medicine, that you must be aware of various restrictions (local ordinances, the Business and Professions Code, and so on). However, *avocational* uses of mental training techniques, about which we are concerned in this book, attract little attention by any authority. "Avocational use of mental training techniques" means practicing them as a hobby, or only occasionally, for purposes of *self-improvement* or *relaxation*. It is appropriate, therefore, to hypnotize a friend, for example, assuming you do it for free, and it is for the purpose of helping your friend with his sports, studies, or something else worthwhile.

Along these lines, I advise athletes to develop a self-hypnosis, self-visualization, or self-meditation capability. One reason is because, having attained this type of capability, it costs you nothing to employ. By contrast, a half hour session with a sports psychologist or hypnotist currently averages \$50—and that is getting off cheap. Some of the top sports psychologists with whom I have talked charge \$125 or more a session! Sports superstars can afford such an outlay; but, it is not necessary for you to spend such sums. You can learn and practice self-hypnosis, visualization, or meditation on your own with no difficulty. Usually all that is required to get started is for you to read a book or article which describes these techniques and their mastery, and then give it a go; this, in fact, is how many champion athletes learned their preferred mental disciplines. Hopefully, this book will serve you in the same capacity.

You Are Your Own Best Coach

Another reason why you should learn and regularly apply some mental discipline is because you are your own best coach. You know better than anyone else what mental, physical, and technical aspects of your game or event need work. You are, therefore, more likely to carry out your own advice than someone else's. After all, it is a rare coach who knows you and your needs that well (let alone cares about you and your needs that much). Dr. William J. Kroger, author of the most comprehensive textbook on hypnosis, *Clinical and Experimental Hypnosis* (1977), agrees that the individual is more willing to respond to his own suggestions. Dr. Kroger states, "When a person suggests thoughts to himself, this is much more meaningful than when they are given to him by someone else."^[4] It is also unlikely your coach will know anything about mental training strategies, such as the use of hypnosis or visualization. So, to properly prepare yourself mentally, it is best to develop and draw on your own resources.

Now, self-hypnosis, visualization, and meditation do not guarantee you victory or even a good performance. Most of the time they will provide you an outstanding frame of mind for competition. There will be a few occasions, however, where these techniques will seemingly not help you at all. When this happens, often it is not the fault of the techniques, but rather some underlying cause. You may be fed up with competition, burned out or stale, for example. Self-hypnosis, visualization, and meditation are not going to do a good job of psyching you up if that is the way you really feel. Also, if you are out of shape, playing with a cold or otherwise ill, do not expect mental rehearsal techniques to come to the rescue. You will be able to expend a certain amount of energy, and then that is it. As Dr. Kroger observes, "There is no danger that an athlete will go beyond his physiologic limit. The built-in or involuntary reflexes protect the individual against danger at all levels."^[5]

To perform at your best you need to be in top mental condition and in top physical condition! Serious athletes generally have no trouble getting in excellent physical condition; it is the mental part which gives them the most headaches. While we are primarily concerned in this book with the mental conditioning necessary for peak athletic performance, let us not minimize the importance of physical conditioning. You simply have to be in shape if you want to do well in your sport.

Forget Mental Training If You Are a Marijuana or Drug User

Self-hypnosis, visualization, and meditation are not going to prove of much help if you are a user of marijuana or drugs. Pat Collins, Hollywood's "hip" hypnotist, requires all her students enrolled in her self-hypnosis classes to stay off pot and drugs. This is because the individual's motivation is sapped by the effects of marijuana-smoking or drug-taking. According to Collins, four out of five of her students enjoy success with self-hypnosis. "The other 20% who fail to get results," she notes, "do not practice."^[6] Drug users and marijuana smokers, unfortunately, develop a lack of self-discipline to continue practicing self-hypnosis or other mental training techniques—a phenomenon many, including myself, have witnessed.

There is convincing scientific data to explain the inability to concentrate and motivate oneself when on pot. Dr. Hardin Jones, in his book *Sensual Drugs*, relates in detail how a person's brain functions are seriously, and often permanently, damaged by marijuana—harm which occurs even if one smokes pot but once or twice a week. Explains Dr. Jones in part:

The (marijuana) user's psychomotor coordination is impaired. He may suffer illusions and hallucinations, difficulty in recalling events in the immediate past, slowed thinking and narrowed attention span, depersonalization, euphoria or depression, drowsiness or insomnia, difficulty in making accurate self-evaluation, a lowering of inhibition, a loss of judgment, and mental and physical lethargy.^[7]

It should be apparent that an athlete, lethargic and "not all there" from smoking marijuana or indulging in even more destructive drugs such as cocaine, will neglect practicing self-hypnosis or other mental disciplines; he will also likely neglect his physical conditioning and assignments associated with his sport, fading away into a mediocre athlete, former athlete, or worse.^[8] This is exactly what Sam Rutigliano, former Cleveland Browns head coach, discovered. He noted:

In my experience with players on drugs, the first thing they lose is their discipline during meetings. A player on drugs is not going to be able to respond to the tests he has to take. He's not going to be able to practice well. He's not going to be able to play well. He's going to be a little late for this and a little late for that.^[9]

As Coach Rutigliano's observation illustrates, coaches who kick drug users off the team are totally justified in their action, and need make no apologies. The justifications are many, one of them being that the user might recruit other team members into the drug scene; such entrapment

happens all the time nowadays, usually behind the coaches' and families' backs, and is one of the saddest developments in sports.

One reason I have dwelled on the drugs and marijuana issue is to highlight the importance motivation plays in the practicing of and benefitting from self-hypnosis, visualization, and meditation. Drugs and marijuana, by diminishing the athlete's motivation and overall energy level, just do not mix with mental training. As Dr. Kroger points out, the effectiveness of self-hypnosis "depends upon strong motivation, the intelligent application of the autosuggestions, and diligence: these are the essential prerequisites."^[10]

Similarities Between Self-hypnosis and Meditation

I have referred to self-hypnosis and meditation in the same breath so far because basically they are the same thing. Self-hypnosis and meditation produce similar physiologic effects on the body. This was confirmed by Larry C. Walrath and David W. Hamilton, whose experiments showed that "autohypnosis and meditation produce similar effects on autonomic arousal."^[11] Some of these similar effects included a lower heart rate and lower breathing rate. Interestingly, a control group who did not use self-hypnosis or meditation but instead was just told to relax, also experienced a lower heart and breathing rate. This led the experimenters to state that "the effects of meditation can be replicated by simple instruction."^[12]

Self-hypnosis and meditation, if they can be said to differ at all, do so mainly in the frame of mind they provide. In meditation you ordinarily clear your mind of all thoughts, and emerge from the session experiencing a general sense of well-being. You can do the same thing with self-hypnosis, but self-hypnosis practitioners usually strive for more than just relaxation. Athletes who use self-hypnosis often give themselves hypnotic suggestions which intensify their competitiveness and aggressiveness—for example, "Today, I will play as hard as I can. I will totally dominate my opponent and win!" These types of suggestions are somewhat strong, but by and large they are effective; athletes into self-hypnosis do not hesitate implanting their subconscious with such thoughts. Along these lines, Dr. Warren R. Johnson notes that "athletes seem happy with the idea of suggestions which would encourage them to be more aggressive in a sportsmanlike way."^[13] This is not surprising, for serious athletes thrive on putting out; they are not in sports to surrender to their opponent, or walk away knowing they could have done better.

Just as self-hypnosis and meditation are pretty much the same thing, so too are other mental techniques favored by certain athletes—techniques such as visualization, imagery, biofeedback, and yoga. *Visualization*, a mental discipline currently popular with Olympic athletes and sports psychologists, calls for you to: (1) **picture** in your mind the way you want to perform an action, and/or (2) **feel** yourself performing the desired action. For best results, you generally practice visualization while in a relaxed state and with your eyes closed (the same holds true for self-hypnosis and meditation). *Imagery* is the same thing as visualization; it is a term sports psychologists operating at the college level seem to prefer. We shall investigate visualization, biofeedback, and yoga in greater detail in later chapters. For now it is sufficient to note that there is one highly important physiologic benefit any mental rehearsal technique can provide the athlete: the lowering of the lactic acid level in the muscles and blood. Lactic acid, the "fatigue acid," is the waste product created by the muscles during exertion. If you exercise hard enough and long enough, lactic acid accumulates in your tissues and blood to such an extent that you finally experience fatigue. The high lactic acid level in your body inhibits or prevents your muscles from contracting. A lactic acid level concentration in your muscle fibers of about 0.3% makes further physical activity virtually impossible.

However, you can significantly reduce the accumulation of lactic acid in your body during competition. Herbert Benson points out in his informative book, *The Relaxation Response* (1975),

that “blood-lactate levels fall rapidly during the first ten minutes of meditation.” Ordinarily, after hard exercise the lactic acid level in your body takes an hour or longer to return to normal. This is too long a time period, though, to help you during a game. But, keep in mind that you can meditate during halftime, time outs, or breaks. In this fashion you can dramatically lower the lactic acid level in your body, which is a good employment of time while you are waiting for competition to resume. Quite a few sports champions, in fact, follow this strategy.

Self-hypnosis for the Athlete

Because all mental rehearsal techniques contain elements of hypnosis, let us take a closer look at self-hypnosis (autosuggestion), how one can learn it, and how the athlete can benefit from it. To begin with, we should define hypnosis. Naturally, there are as many definitions of hypnosis as there are books out on the subject. There is one definition, however, I have found most useful. It was given by Dr. William J. Bryan, author of *Legal Aspects of Hypnosis* (1962), while testifying before the California Assembly’s Subcommittee on Professions and Occupations (September 11, 1964). He said:

Hypnosis is a state of mind; it is a state in which three things are always present:

1. Superconcentration of the mind.
2. Relaxation of the body, and
3. Increased susceptibility to suggestion.

It is important that hypnosis be looked upon as a **state of mind**. Too many people still adhere to the lingering prejudice—a prejudice born of ignorance—that hypnosis is some sort of black magic. It is, of course, neither black nor white magic. But, as long as the misconception persists, the fact that hypnosis is simply a state of mind should be emphasized to add precision and sobriety to any discussion of the subject.

Hypnosis has also been defined as exaggerated suggestibility. This is another good way to understand the term, for in this book proper hypnotic suggestions are considered a key element to one’s maximizing his full athletic potential.

The alleged drawback to self-hypnosis is that the person, acting as his own hypnotist, might give himself foolish suggestions. This thought is of more theoretical than practical interest. One would not, for example, give himself the suggestion to “go out and play 30 hard sets of tennis without a break.” But, just in case you might be such a person, please keep this in mind: self-hypnosis predominately strengthens the *mental* side of your game. It cannot make you a physical superman; it cannot make you something you are not. What self-hypnosis does is help you develop and tap your full athletic potential (which might prove to be greater than even you suspect). To ask more from self-hypnosis, though, is asking too much. So, to sum up, use discretion when you put self-hypnosis to work for you; if you do this, the results should please you immensely.

Mastery of self-hypnosis can be of great utility to the serious athlete. It is free, and not dependent upon another person—the hypnotist—who is usually unavailable when you most need him (which is right before or during the competition). By knowing self-hypnosis, you can adapt to changing circumstances during the competition. You are able to do this by giving yourself appropriate hypnotic suggestions as the situation warrants. With additional practice you can give yourself suggestions *instantly* and without attracting any attention whatsoever. Your opponent and the crowd will not notice anything unusual, because everything will be going on inside your head. By utilizing this instant self-hypnosis capability, you should substantially improve your winning percentage and/or athletic performances.

Miroslav Vanek and Bryant Cratty, in *Psychology and the Superior Athlete* (1970), contend that "hypnosis does not permit an athlete to modify his exertions to an unexpected situation that may confront him, for example, the challenge of an opponent in a race." This contention is technically correct if by "hypnosis" Vanek and Cratty mean "reliance on a hypnotist." The statement is false, though, in cases involving the dexterous application of self-hypnosis. The athlete can use self-hypnosis to modify his exertions as the situation demands if: 1) he is proficient at self-hypnosis, being able to enter the hypnotic state of mind instantly while competing; and/or 2) he performs during the whole competition in the autohypnotic state. In both cases the athlete can immediately give himself appropriate hypnotic suggestions to deal with unforeseen events. The experiences of various elite level athletes, presented throughout this book, will demonstrate that these two capabilities—mastery of instant self-hypnosis, and competing while under self-hypnosis—are not impossible to attain. Diligent practice is all that is required.

Why Self-hypnosis and Related Mental Disciplines Work

The human mind, while in a normal waking, or conscious, state, generates what are called Beta waves. These Beta waves, as they show up on an EEG (electroencephalograph) machine, appear as small, compressed, and quite rapid up-and-down lines (Illustration 1). Such lines represent a constant flow of energy permeating the brain. Many authorities contend it is the presence of this constant energy level in an awake person's brain which makes self-programming—that is, convincing oneself to engage in a new behavior or outlook—difficult; simply explained, Beta waves, with their compactness, do not pull apart easily, and so do not readily permit the insertion of different thought patterns.

As one goes to sleep, however, or enters into an altered state of consciousness, such as that experienced in hypnosis, the brain wave levels change. Alpha waves (Illustration 2) or, in even "deeper" states, Theta waves, arise—waves the EEG machine reveals as being slower, more



Illustration 1: Beta waves, as seen on EEG machine.

spaced apart, and possessing greater energy level fluctuations than Beta waves. When these capacious waves prevail in the brain, hypnotic suggestions and their kin are less likely to be shoved out and rejected by the mind; instead, they are more apt to "fit in" and in the process help create a new mind-set.

Most coaches are unaware of the Beta to Alpha wave phenomenon and its implications, and continue to resort to old-fashioned "pep talk" sessions in the hope of squeezing better

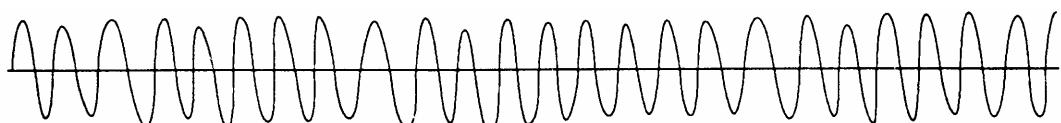


Illustration 2: Alpha waves, as seen on EEG machine.

performances out of each athlete. Such sessions, though, are often exercises in futility—not necessarily because advice given by the coach is bad, but rather because the athlete's mind is relatively unreceptive to any new programming. As is the case in one who is awake and attentive, Beta waves predominate in the athlete's brain. And it is at this point where frustration and disenchantment between coach and athlete many times originate. The coach might tell the athlete

to do X, but the athlete does Y instead, or tries to do X but fails miserably; this is followed by accusations of insubordination or incompetency, leaving a residue of ill will. Without dwelling upon this matter further, it is important here to observe that there is a big difference between an athlete who is *attentive* and one who is *receptive*. The former listens alertly to the message, but often does not act in accordance with it, whereas the latter generally follows the advice with few deviations. Briefly stated, the presence or absence of Beta or Alpha wave levels within the athlete's brain during a coaching input session can contribute to this difference in behavior.

How to Learn Self-hypnosis

Everyone who has explored self-hypnosis has his own preference in reaching the hypnotic state of mind. The following procedure has worked well for the several athletes I have guided toward proficiency in self-hypnosis. Its merit can be attributed to its simplicity.

1. Select a quiet, comfortable place—bed, sofa, soft grass at a park, or whatever. Lie or sit. Remember, a relaxation of the body is necessary, as well as superconcentration of the mind.

2. Keeping your eyes open, find a spot at which to stare. A spot on the ceiling, a leaf in a tree, something of the sort, will do fine. Stare at the spot while mentally telling yourself to relax. Think yourself into relaxation in your own words (whatever words seem to work best for you).

Keep staring at the spot all the while. This *focus of attention*, combined with the command to relax, causes an inhibition effect in the cerebral cortex (the part of the brain concerned with complex mental processes), allowing you to enter the hypnotic state of mind.

It is wise to tell yourself to relax once every 20 or 30 seconds. There is no hurry. Instructions given at machine gun rate, however, are not conducive to relaxation. Assuming you are in a reclined position, you will know you are relaxing when your lower back feels as if it is sinking into that on which you are resting. This will be a different, but pleasant, feeling because many athletes, through overdevelopment of their hamstrings and calf muscles, are swayback.

(Spend about 5 minutes on this relaxation stage.)

3. By now, your eyes will probably feel tired and want to shut. Go ahead and let them shut. Still talk relaxation to yourself. After another minute, tell yourself: "On the count of three, I will slowly open my eyes. One ... two . . . three." Most likely you will then slowly open your eyes. Keep them open for 20 or 30 seconds. Then tell yourself: "On the count of three, I will slowly close my eyes. One . . . Two . . . three." And, odds are you will slowly close your eyes.

(Keep practicing this eye opening and closing drill for about 5 minutes.)

If you are not successful with the eye opening and closing drill the first time, keep thinking relaxation, and try again, and again if necessary. It is quite easy, really. Spending a few extra moments to master this drill is well worth it!

Having succeeded at the eye opening and closing drill, congratulations are in order, for most assuredly you have attained the hypnotic state of mind. It is not necessary to attempt any further drills to "prove" you are under hypnosis. You could try a different drill, as occasionally do the athletes with whom I have worked, whereby you practice folding and unfolding your hands across your stomach. But, you do not need to do this. The mastery of the eye opening and closing drill does not constitute, of course, the deepest stage of hypnosis; it is a state, though, that will respond favorably to hypnotic suggestions. You do not have to be "real deep" to successfully program into your subconscious the hypnotic suggestions you give yourself. The hypnotic stage represented by control over small muscle groups—such as the eyes—is sufficient.

4. "Awake" yourself. (You are not really "asleep" while practicing self-hypnosis; actually, you

are very much awake. In fact, if the house started to burn down, you would not keep lying there. You'd get out!)

To "awake," simply tell yourself: "On the count of three, I will awake. One . . . two . . . three. I'm awake!"

After saying this, you will probably look around, slowly sit up, and generally puzzle over the experience through which you have just been. This is a common reaction. The first session at learning self-hypnosis is an out-of-the-ordinary happening. So, you should be puzzled afterwards, especially if you did not believe in hypnosis or thought you could not be hypnotized.

5. Now that you are "awake" again, you should attempt to put yourself back in the hypnotic state. This is done to make sure you have learned self-hypnosis. To reenter the hypnotic state, you do not need to repeat the entire routine (which you already know works). Perhaps just close your eyes and talk relaxation for a minute. However you go about it, you know you are succeeding when these sensations typical of hypnosis come over you: 1) a detached feeling, 2) a heaviness or numbness in your arms and legs, and 3) a disinclination to exert yourself and move about.

At this stage you may still be unsure that you have reattained the hypnotic state. If this is the case, it is all right to try, for example, the eye opening and closing drill. By the third or fourth self-hypnosis session, though, you should be able to dispense with such proofs and reassurances. Progress comes fast when you practice.

"Reawaken" yourself after regaining the hypnotic state of mind. It should be emphasized that you should have no trouble reawakening yourself. As Dr. Kroger observes, "Failures in self-dehypnotization are rare," adding that he personally "has never had a case."

Summary of First Self-hypnosis Session

The steps you can follow during your first self-hypnosis session can be summarized as:

1. Lie or sit in a quiet, comfortable place.
2. Stare at a point while telling yourself to relax.
(Spend about 5 minutes.)
3. Allow your eyes to close. Then, give yourself the suggestion to open them. After your eyes open, give yourself the suggestion to close them. Keep repeating this process.
(Spend about 5 minutes.)
4. "Awake" yourself. ("On the count of three, I will awaken. One... two... three. I'm awake! ")
5. Put yourself back in the hypnotic state. Once you succeed, "reawaken" yourself.

It is important that you practice self-hypnosis as much as possible, for that is how you become proficient at the technique. "Autohypnosis," informs Dr. Kroger, "is a learned conditioned response; therefore, one must try to practice as much as possible every day." [14] How long should these practice sessions last, and how many should you do? Dr. Kroger suggests one perform "half a dozen sessions of 2 or 10 minutes each throughout the day," these being "more practical than lengthier sessions." [15] Dr. Kroger's recommendation to practice self-hypnosis frequently while keeping the sessions short is one well-suited for athletes. As an athlete, you desire the capability of entering and exiting the hypnotic state as quickly as possible. During competitions you usually do not have much time to collect your thoughts for the unexpected situations that often develop. So, you want to be able to give yourself appropriate hypnotic suggestions, if needed, during a time out or some break in the action. The 2-minute self-hypnosis practice session Dr. Kroger recommends is a good *simulation*, therefore, of an emergency self-hypnosis session you might

wish to conduct during a short break in the competition.

Of course, if you practice self-hypnosis diligently, you can also develop the advanced capability of entering the hypnotic state during the actual competition, and give yourself suggestions on the spot. As I have indicated, speed of entering the hypnotic state of mind is primarily a function of practice. The more you practice self-hypnosis, the faster you will be able to enter the hypnotic state, give yourself suggestions, and respond to those suggestions. But, even if you do not develop the ideal—the instant self-hypnosis capability—you can still use self-hypnosis to gain an enormous mental edge over your opponent. As the old saying by Voltaire goes, “Best is the enemy of the good enough.” Knowing and faithfully applying self-hypnosis to your sports is good enough—good enough to improve your athletic performance substantially.

Acquiring the self-hypnosis capability, and employing it in areas of your life where you desire success, such as your sports, will place you head and shoulders above the crowd. For the crowd will not make the effort to learn self-hypnosis; they are too busy getting drunk or whatever, and do not care about self-improvement. Remember: You don't have to be best at something if you are the only one who's trying it at all!

Hypnotic Suggestions

The purpose of getting into the autohypnotic state is to give yourself hypnotic suggestions. It is the suggestions which allow you to overcome all those mental obstacles that often prevent you from achieving your full athletic potential. Let me present a hypothetical example showing how hypnotic suggestions can help you. (The outcome of this example is not so hypothetical when we examine the numerous success stories appearing later in this book; instead, it is a matter of course.)

You are a tennis player. You have a match lined up in the afternoon against an old-time rival of yours. Your matches are usually close. You know exactly what you have to do to win. Unfortunately, you have not been winning recently. Desiring therefore to end the frustrating losing streak, you put yourself in the hypnotic state, and give yourself the suggestions to “swing through on the backhand” and “play your game.”

So, what happens? Your opponent plays his usual good game, but, somewhat surprisingly, you prevail. And wonder of wonders: you swung through on every backhand—something you have not done in months! Skeptics would pass this incident off as coincidence. Meanwhile, you might simply say, “Well, I finally put it together.” While your statement contains more factuality than the skeptics’ claim of coincidence, it is not too enlightening. In reality, the hypnotic suggestions to “swing through on the backhand” and “play your game” brought out the best in you, which made it possible for you to win the match.

Realize this: hypnotic suggestions act on the **subconscious**—that great stock of knowledge which, while often forgotten and submerged, is capable of being recalled. This means that, in our example of the frustrated tennis player, you resurrect all those astonishing shots that once upon a time carried you to glory—topspin backhands, swinging volleys, and the like. Keep in mind that the degree to which hypnotic suggestions can help you implement good tennis shots, or whatever, depends upon the current state of your athletic potential. If you are out of practice and not in the best physical condition, obviously your athletic potential is not as great as it could be. It limits the extent to which you can be helped by hypnotic suggestions.

Another important point to know is that hypnotic suggestions possess an *impelling* force. It is as if you must carry out the suggestions. It would not be unusual if you did not carry out the suggestions; nothing is foolproof. But, it would be most unlikely.

By giving yourself appropriate hypnotic suggestions, you should perform well despite the

strongest efforts of your conscious self to make you do otherwise. You will do well because, essentially, your subconscious is in charge. The hypnotic suggestions will not work as intended all the time—they cannot guarantee victory or super performances; but, assuming you persist in practicing self-hypnosis, the suggestions will work often enough and impressively enough for you to notice a substantial improvement in your athletic performance and won/loss record. As Dr. Kroger observes of self-hypnosis, it “makes available a tremendous reservoir of unrecognized potential strength—the ‘forgotten assets.’ Diligent practice, however, generally is necessary”[16] for this to occur.

Types of Suggestions

Athletes new to self-hypnosis often wonder what types of hypnotic suggestions they should give themselves. The choice is between suggestions of a general nature or those of a **technical**, specific nature. A general suggestion would be “I will concentrate on every point” or “I will play as hard as I can, and win!” In contrast, a technical suggestion might be “I will keep my arms up on defense” or “I will step into the volley.” Both types of suggestions are valuable. Which type is more valuable for you depends upon your own particular needs.

Personally, I prefer general suggestions. When you give yourself a **general** suggestion, such as “play hard and win,” the technical matters tend to take care of themselves. Also, you can lose sight of your overall objective if you emphasize technical suggestions. The bottom line—which is to improve your athletic performance and/or to win—is top priority. Take care of it first; then, if you want, you can concern yourself with technical matters.

Emil Coué, an eminent hypnotist of the early 1900s, also advocated general suggestions. To him the end result was the only thing that counted. Dr. Kroger relates that Coué “emphasized that a general, nonspecific suggestion was best, since it would be received uncritically. He became famous for a phrase he urged his patients to say to themselves several times a day, ‘Everyday, in every way, I am getting better and better.’”[17] Note that Coué’s phrase does not enter into details about how the person will get better and better—just that he will. Does the phrase work, though? In many instances, yes. Coué enjoyed enormous success with his patients, who responded most favorably to the general autosuggestions they gave themselves. This was no accident, for clinical studies by psychiatrist John Hartland and associates of his confirm the effectiveness of the general autosuggestion approach.[18] From this it should follow that what works for people in the area of health most certainly will work for them in the area of sports.

When to Give Yourself Suggestions

Probably the most convenient time to give yourself autosuggestions is on the same day you compete. Obviously, you do this minutes or hours before the competition begins. By waiting until the day you compete: 1) you should know who your opponent will be, and perhaps have a chance to gather intelligence about his strengths and weaknesses, and 2) you should know what the weather will be like, whether or not you will be playing before a hostile crowd—in short, better understand the playing conditions that might affect your performance. Knowing these variables, you will be able to give yourself **tailor-made** autosuggestions. For example, if you know the crowd will be against you, you can give yourself the suggestion, “During the entire game I will play with *total* concentration no matter what!” This kind of suggestion will go a long way toward eliminating the crowd as a factor.

Another excellent reason to give yourself autosuggestions on the same day on which you compete is that the suggestions will be fresh. Studies indicate that the more recent the auto-suggestion, the more likely it is that you will carry it out completely. Reports Dr. Kroger, “A

posthypnotic suggestion may last for months to years. It is agreed, however, that it may remain effective for several months. During this period, decrement occurs in the quality of the posthypnotic performance.”[19] There is nothing wrong with giving yourself autosuggestions a couple of weeks or months before a big game or match; in fact, it is highly commendable that you do this. To be on the safe side, though, give yourself reinforcing autosuggestions on the day of competition.[20] You want to do this in case the effects of your earlier suggestions have waned.

Ideally, for a major upcoming competition, you should give yourself autosuggestions every day in the days or weeks preceding the contest, as well as on the day you perform. If you do this, about the only way you can lose is if your opponent is physically and/or technically superior to you. (You try to be sure that such is not the case by working on your physical fitness and the technical aspects required in your sport.) Some people believe constant reinforcement will render an autosuggestion “stale” and ineffective; actually, the opposite is true. Dr. Kroger notes: “Periodic reinforcement tends to increase its effectiveness; repeated elicitation does not weaken it.”[21] Therefore one should not worry about too much reinforcement.

So, the answer to the question, “When do you give yourself autosuggestions?” is (1) especially on the day you compete, and (2) preferably on the days and weeks preceding the competition as well.

Giving Yourself Autosuggestions during Competition without Anyone Noticing

Having developed the ability to instantly enter and exit the hypnotic state, you quickly can give yourself suggestions and “awaken” yourself, thereby wrapping up the session without making it some sort of grand production.

I have also mentioned that you can develop the capability of playing your sport while in the hypnotic state (this is something I have done occasionally). By giving yourself the suggestion to “act normal but still remain under hypnosis,” you can compete in your sport, carry on a conversation, and so on without others being the wiser. Perfecting this capability takes a little extra practice, and one’s first attempt sometimes betrays a lack of spontaneity and monotone-sounding speech.

In any event, competing while in the hypnotic state has no great advantage over giving yourself autosuggestions beforehand, and during breaks and time outs. But, you wonder, how can I give myself suggestions during breaks and time outs? Obviously, **quickness**—developed from *practice*—**is the key**. And quickness is imperative because the rules do not permit you much time during breaks and time outs. In a tennis match, for example, you are allowed but one minute to rest and towel off between the change of sides. So, to use self-hypnosis during competition you must be able to rapidly enter the hypnotic state, give yourself suggestions, and “awaken” yourself; all this must take place in a *minute or less*. Once again, though, this capability is not that difficult to develop. Many athletes acquire the necessary speed after just a couple of self-hypnosis practice sessions.

By giving yourself autosuggestions quickly, you escape attention and do not attract stares. This is an important point because most of us are self-conscious to some degree. Your opponent and the spectators really will not look at you twice as you sit on the bench during a break with your eyes closed (or however else you appear while giving yourself autosuggestions). At most they will say, “Oh, he’s resting” or “He’s concentrating.” Even if there is an expert on self-hypnosis in the crowd, he will not know for sure what you are doing. He would have to ask you afterwards if you were using self-hypnosis or meditation during the breaks to confirm his suspicions. Despite outward appearances, you are not “resting” or merely “concentrating.”

Through self-hypnosis you are actually laying the groundwork for your victory and your opponent's downfall. Of course, your opponent does not know that. In fact, afterwards he will probably wonder what hit him, what kind of dynamo he just ran up against.

Sometimes your opponent or the spectators will be too gregarious. During breaks you might be unable to give yourself autosuggestions because of people, or your opponent, talking to you; or, some other interruptions might arise. There is little you can do about this. Just make sure that before you arrive for the competition you have already given yourself suggestions.

Summary of Important Points

To become proficient in the use of self-hypnosis, and also a mentally tough athlete:

- 1) Practice self-hypnosis as often as possible. Spend 2 to 10 minutes for each practice session. Attempt to acquire the instant self-hypnosis capability.
- 2) Give yourself general autosuggestions ("I will play with total confidence and win!"). Do this first. Then, if necessary, you can also employ technical suggestions.
- 3) Give yourself suggestions every day in the days or weeks before the competition, because reinforcement makes the suggestions more effective. Definitely give yourself suggestions on the day you compete.
- 4) If the situation requires, reenter the hypnotic state and reinforce your suggestions during a break or time out. Your opponent and the spectators will simply think you are "resting" or "concentrating."

By following these steps, you can achieve your full athletic potential. You will put pressure on your opponent. He will have to perform really well because you will not beat yourself through mental errors and "choking."

FOOTNOTES

1. Beth Ann Krier, "Olympians Exercising in Mind Arena," *Los Angeles Times*, June 7, 1983, Part I, p. 19.
2. Steve Grimley, "Mind Games: U.S. Slow to Accept Sports Psychology," *Orange County Register*, April 19, 1985, Part D, p. 15.
3. Robert A. Romanoff, "Hypnotism and State Laws," *Hypnosis Quarterly*, Vol. XXII, No. 3, 1979, p. 24.
4. William J. Kroger, *Clinical and Experimental Hypnosis*, (Philadelphia: J. B. Lippincott Company, 1977), p. 86.
5. Ibid., p. 339.
6. Lydia Lane, "Crusader for Mind Power," *Los Angeles Times*, August 17, 1977, Part IV, p. 13.
7. Hardin B. Jones and Helen C. Jones, *Sensual Drugs*, (New York: Cambridge University Press, 1977), p. 218.
8. Dr. Graham Reedy, team physician for the Oakland Raiders between 1971 and 1976, saw this pattern develop in Raiders players who smoked pot. Dr. Reedy states in a July 15, 1981 *UPI* report: "Even those who used small amounts (of marijuana) and not on game day just couldn't keep up the peak performance required of professional football players. Regular users were usually gone by the end of one year. The maximum time a regular user was with the team was two years."
9. "Rutigliano Says Rogers Was 'Clean,'" *Orange County Register*, July 20, 1986, Part D, p. 19.
10. Kroger, *op. cit.*, p. 85.
11. Larry C. Walrath and David W. Hamilton, "Autonomic Correlates of Meditation and Hypnosis," *The American Journal of Clinical Hypnosis*, Volume 17, Number 3; January, 1975, p. 196.
12. Ibid.
13. Warren R. Johnson, "Hypnosis and Muscular Performance," *Contemporary Readings in Sport Psychology*, (Springfield,

- Illinois: Charles C. Thomas, 1970), p. 418.
14. Kroger, *op. cit.*, p. 86.
 15. Ibid.
 16. Ibid., p. 11.
 17. Ibid., p. 49.
 18. "The Value of 'Ego-strengthening' Procedures Prior to Direct Symptom Removal Under Hypnosis," *American Journal of Clinical Hypnosis*, Vol. 8, 1965, p. 89.
 19. Kroger, *op. cit.*, p. 14.
 20. Soviet scientist G. D. Gorbunov agrees with this position, advocating that athletes actualize "the goals of good effort, of what to do, how to do it, and when to do it... in the last few minutes and, in some cases, seconds before the start." Employing various mental rehearsal techniques, many Soviet Olympic gold medalists, such as Valery Borzov (sprinter) and Boris Shaklin (gymnast), did exactly this (see Soviet Athlete chapter and Recent Developments in Sports Psychology and Mental Training chapter).
 21. Kroger, *op. cit.*, p. 14.

**MENTAL TRAINING STRATEGIES TIME LINE
(TENNIS)**

TRAINING PERIOD	Biofeedback Training to Promote Relaxation	
	(Coach Nick Bollettieri tried this with Aaron Krickstein and Jimmy Arias)	Self-hypnosis Sessions
		(Billie Jean King spent five minutes each night repeating to herself, "I can win Wimbledon!" She ended up winning 20 Wimbledon titles; see Lundgren's comments)
	Practicing Imagery	
	(Hana Mandlikova; Danish and Ellis; Bunker and Rotella; Weisberg blended imagery into her hypnosis sessions)	Listening to a Visualization Audio Tape
		(Bunker and Rotella recommend you do this every night)
	Listening to Pleasant Music	
	(Billie Jean King, Virginia Wade)	Use of Imagery the Day Before a Big Match
		(Done by all-time greats Martina Navratilova and Chris Evert)
	Visualizing Between Games	
THE MATCH	(Paul Annacone, who also visualizes in the locker room before a match)	Use of Autosuggestions during the Match
	Meditating between Games	(Bob Payan, Paul Shaver, and the author also gave themselves autosuggestions during the week preceding the tournament, as well as just before the match)
	(Arthur Ashe did this during his surprise win over Connors at 1975 Wimbledon finals)	

TENNIS :

MEDITATION, IMAGERY, AND SELF-HYPNOSIS

ATTRACT LARGE DRAW

“Choke artist,” “just a club player,” and “perennial first round loser”: these are popular labels most tennis players at one time or another have had to live down. Many players never escape from this rut, even though they desperately want to. They buy new rackets, take expensive lessons, and practice for hours every day—and still they lose! There is hope, however, for such players. Several professional and amateur tennis players have used meditation, imagery, and self-hypnosis to dramatically raise the level of their games, leading to startling victories, and, as a welcome by-product, the silencing of the critics.

In 1975 Arthur Ashe faced Jimmy Connors in the finals at Wimbledon. Everyone knew Connors would win—except Ashe. Ashe had not won too many tournaments the previous years, and the critics were really getting on his case. But, for Wimbledon he had a surprise in store for his detractors. Throughout the tournament Ashe employed a relaxation and concentration procedure between games which resembled meditation. Bob Gillen, *Tennis USA* reporter, describes this procedure:

During the changeovers of the match Ashe would sit very still in his chair with his eyes closed for 20-30 seconds. “I try to totally relax during these moments and shut out all distractions,” Ashe said. “If you try to do too much during a changeover, it will tire you out even more, not rest you or help your concentration.”[1]

In meditation your first objective is to clear the mind and achieve some degree of relaxation. Ashe at Wimbledon strove for this, and succeeded. It was reported in *World Tennis* that Ashe sat “motionless in his chair, eyes closed like some meditative Buddha, letting his whole body and mind sink into a state of total relaxation for 30 seconds.”[2] The TV cameras picked this up quite clearly, and it drew the attention of the sportscasters who informed the viewers that Ashe was “concentrating.” Ashe probably did more than just concentrate. Most likely he briefly entered a meditative state. Alex Metreveli, the 1973 Wimbledon finalist, thinks not, however. He shares the sportscasters’ opinion. I asked him if he thought Ashe used meditation during his match against Connors. Replied Metreveli:

I don’t think so. It was probably just good concentration. I saw him in the dressing room before the match, and he was just concentrating for the match. He was preparing a couple of days before the finals. So, when he come to the center court at Wimbledon, he was already prepared. During all the match he don’t lose any concentration. He was just, you know, concentrating for each point for each game.

Despite the opinion of Metreveli and the sportscasters, the weight of evidence continued to mount that Ashe used some form of meditation during the ’75 Wimbledon final. For example, Barry McKay, a top professional player of the ’60s and former Junior Davis Cup Coach, contended that Ashe used meditation on several occasions. Speaking to Bud Winter, author of *Relax and Win* (1981), McKay stated:

One obvious player who has used meditation during matches, and did it very successfully, especially in winning the 1975 Wimbledon final, was Arthur Ashe. The players all have ninety seconds in a changeover between games and Arthur used a lot of that period to simply sit and meditate, and it was shown on national and international television. . .

In an attempt to move from speculation to certainty, I wrote Ashe, asking him if he employed meditation in his Wimbledon match against Connors. I received no direct answer, but the query was addressed several years later. Ashe, writing in the Foreword to James Loehr's *Mental Toughness Training for Sports* (1986), clarified the matter:

During my 1975 Wimbledon finals match with Jimmy Connors, I was occasionally seen with my eyes closed when resting between games. This prompted the post-match inquiry, "Were you meditating?" My answer was always "yes and no." "Yes" in the sense that it was a formalized technique of mental and physical relaxation. "No" in that I was not reciting any special words or mantras to myself for ninety seconds.

Whether we wish to call Ashe's "formalized technique of mental and physical relaxation" meditation or "good concentration," what remains unquestioned is the fact that he played tremendous tennis in the '75 Wimbledon finals. Ashe dumped Connors in four sets. This happened during a period when Connors had been virtually unbeatable; in fact, people were calling him the greatest tennis player of all time. Ashe's triumph, therefore, was a true shocker.

Nine years later at the '84 Wimbledon, visualization helped bring about another minor miracle. Paul Annacone, then age 21 and playing in his first professional tournament, reached the quarterfinals before losing to Jimmy Connors. Annacone, who has gone on to enjoy a good career in the pros, did something very similar to what Arthur Ashe did in the '75 Wimbledon. "It's called 'visualizing.' I try to empty my mind," explained Annacone at the time, who performed his visualization while sitting on the chair between changeovers and in the locker room before the match.^[3] *L. A. Times* correspondent Rick Reilly, who reported the story on Annacone's employment of a mental training strategy, described how "he tries to go outside his body and watch himself sitting in the chair, breathing." The purpose is to help Annacone relax, who observed that once this is accomplished, "then I can think about the job at hand."

What Ashe did in 1975 seems practically identical to what Annacone did in 1984, only the names given to each are different. Ashe was either "meditating" or "concentrating," whereas Annacone was "visualizing"; Reilly, in fact, says that Annacone "went into his yoga bit," providing yet another name for the same practice. The names assigned to this practice of clearing the mind and relaxing are, of course, unimportant. The important thing is that you try out a mental preparation technique, perhaps one such as used by Ashe and Annacone, giving it an honest trial. If the technique works for you, you are now a mentally tougher and more formidable competitor; if the technique does not work, you have not really lost anything.

Linda Bunker and Robert Rotella, in their book *Mind, Set, and Match* (1982), offer several visualization techniques for tennis players to try. One of the techniques they suggest is for you to make a self-instruction audio tape, which you are to play "over and over each night to let the good thoughts sink into your head." A sampling of the good thoughts Bunker and Rotella recommend you put on the tape are:

I am hitting very well; I hit my volleys in front of me with a firm wrist, putting them away in the corners. Most of my serves go in unreturnable, but a few miss by inches. I play one shot at a time the best that I can hit each ball.

Bunker and Rotella believe that "you will perform on the tennis court as you picture yourself performing." To perform well, say the authors, you should picture successful shots; the visualization tape helps one picture such shots. According to Bunker and Rotella, mentally experiencing successful shots can be done using external imagery or internal imagery. With external imagery you view yourself making good shots; with internal imagery you "feel" yourself hitting the ball well. The authors suggest that you mentally "feel your grip, feel your backswing begin and stop, feel your weight transfer through the ball contact, feel yourself hit through the ball and finish."

Mind, Set, and Match contains mental preparation techniques, self-awareness tests, concentration exercises, etc. similar to those found in other sports psychology books. Bunker and Rotella do not provide testimonials of any tennis players who have specifically used the mental rehearsal techniques presented in their book; but, one can assume that the techniques are helpful because they resemble what many tennis players have used with great success.

A good article on applying imagery to tennis, “Mental Imagery: A Practice Technique You Can Use Anywhere,” appeared in the December, 1985 issue of *Tennis* magazine. The authors of this article, Steven J. Danish and Eve E. Ellis, lead you through an imagery session whereby, after you get into a state of relaxation with eyes closed, you picture a top pro hitting a shot you wish to perfect. The example Danish and Ellis provide is that of Chris Evert hitting deep ground strokes. After seeing in your mind how Evert hits the ball, “your next step,” say the authors, “is imagining (Evert) and yourself hitting forehands next to each other.” From this external imagery vantage point Danish and Ellis direct you “back inside your own body, feeling the shot” (internal imagery). They advise you to practice the internal imagery until you get to the point to where “you feel comfortable and confident with this shot” (this step should take you 5 minutes or less). After accomplishing this, you may terminate the session by opening your eyes.

Danish and Ellis suggest that “one way to practice imagery is to wake up early and do it for 10 minutes.” They also recommend you use the technique before playing a match. Again, the authors do not name any players who have benefitted from the type of imagery procedure they prescribe, but their approach appears promising because it incorporates both external and internal imagery (on top of relaxation).

A noteworthy example of how practicing imagery can help one’s game is provided by the experience of tennis great Martina Navratilova. In her book, *Tennis My Way* (1983), she describes her selective use of imagery:

Especially if I’ve got a grudge match, or I want to prove something, win something big, I will go to sleep imagining what I am going to do. I try to envision the kind of points I want to be playing, the feeling of euphoria after the win, everything. Sometimes I have woken up the next day feeling like it’s already happened. That’s how real I can imagine the tennis to be.

Navratilova, the first woman professional athlete to win over \$10,000,000 in earnings, apparently does not practice imagery before every match, and with her talent probably does not need to. Only for special occasions—a “grudge match,” for instance—does she employ the technique. In the 1986 Virginia Slims of Dallas Tournament, Navratilova met Chris Evert in the finals, and beat her in 57 minutes, 6-2, 6-1; this was the third worst defeat Navratilova had handed Evert over their 13-year rivalry. The *Associated Press* reported how the victor used imagery to prepare for the match. Stated Navratilova:

I played the match over in my head last night and I didn’t get to sleep until 1 a.m. I felt Chris was nervous at the beginning and I didn’t feel threatened. I didn’t think she could hurt me.[4]

The ladies’ champion practices her imagery the night before an important match, which is when Bunker and Rotella recommend you listen to a self-made visualization audio tape (though they urge you to listen to it every night). Late at night, particularly when falling asleep, is an excellent time for one to perform a mental training strategy, as we discuss at length elsewhere in this book. One thing Navratilova does not say is how she learned imagery, but clearly the discipline has helped her maximize her enormous athletic potential.

Other women tennis pros, fully appreciating the difficulty of excelling in their sport, have turned to mental training for assistance. Hana Mandlikova, who defeated Navratilova in the finals

of the 1985 U.S. Open, also engaged in imagery exercises to improve her on-court concentration. Focusing in on the matter at hand, whether it was playing tennis or participating in some other activity, had presented problems to Mandlikova over the years. She explained in the May, 1986 issue of *Tennis*, "If I was talking to somebody, I'd be listening to maybe five other people around me at the same time."^[5] Her coach, Betty Stove, recognized the problem, and culled sports psychology books to find the logical remedy. Related Mandlikova:

Betty has really helped me mentally by giving me special exercises all the time. I would get bored if I had to read all the books, but she picks things out and writes them down for me to look at. She believes that tennis and working on the court is O.K., but that you also have to work your brain off the court. I remember one of the exercises taught how to concentrate on one specific thing. I've always had trouble with that. . . In this exercise, you look at a watch and concentrate on the hands for one minute. Then you rest a couple of minutes and imagine the watch hands moving in your head for one minute. I came pretty close to hitting the time consistently with practice. Things like that help on court when there are so many distractions around.

The watch-hand exercise is, of course, an imagery drill; some people might simply call it a "concentration exercise." But, it matters little what it is called. The drill, once mastered, leads you on to the next step, which is to imagine yourself hitting perfect shots, and so on. By regularly practicing this stage of imagery (the practical applications stage), extraneous factors present during competition, such as the crowd or what is going on in the next court, lose much of their potential to disturb you. Hana Mandlikova's experience certainly demonstrates this. She recalled the crowd reaction during her '85 U.S. Open victory over Navratilova:

I could sense the crowd was groaning after Martina won the second set so easily. It was like they were saying, "Oh, no, here she goes again. She's going to lose." But I never felt that inside.

So, the mental training exercises helped Mandlikova to disregard the crowd, and instead listen to her own internal voice. And she prevailed, defeating Navratilova in a third set tiebreaker. This victory was significant given the fact that Mandlikova had not won a Grand Slam title in four years (since the 1981 French Open).

Chris Evert, who along with Martina Navratilova ruled over women's tennis during the '70s and '80s, also employed visualization and other mental training strategies. She notes in a 1986 *Tennis* magazine article that "I have always been known for my mental toughness and determination. Those qualities have probably won me a lot of matches through the years, matches I easily could have lost."^[6] How did Evert maintain her mental toughness and determination? Part of the secret lies in the tennis champion's following a mental preparation plan similar to the one Navratilova uses. She states:

I start thinking about an important match the night before. I visualize what the match will be like and that keeps me from falling asleep. I have a court in my mind and I visualize points. I play the points out inside my head as I think ahead to the next day.

Other things Evert did, she informs us, was listen to rock music while waiting in the locker room before the match to get "in a happy mood" and "positive frame of mind." If the match proved difficult, and went to a third set, "I [would] take some deep breaths and try to stay calm and relaxed," she explained; this was done at the changeovers.

From the late '70s through 1986, few women's Grand Slam titles were won by players other than Martina Navratilova and Chris Evert. It is instructive to note that both champions, comprising the greatest rivalry in the history of women's tennis, used visualization to prepare for the "big one."

Prominent tennis coach Nick Bollettieri sees a great need for mental conditioning; as reported in the November, 1985 issue of *World Tennis*, he advocates mastery and employment of relaxation skills to cope with stress and tension. Working with top tennis pros Jimmy Arias and Aaron Krickstein, Bollettieri had the two undergo biofeedback training, in which "they were connected to a muscle tension feedback instrument and taught to relax and manage their tension."^[7] Each player manifested anxiety in a different way, which seems to be the case with everyone. For instance, says Bollettieri, Arias "gets so worked up before a late afternoon match that he is physically exhausted before he even steps on the court;" by contrast, Krickstein "experiences a tightness in his jaw that sometimes extends down his neck, into his shoulder, and even into his arm." Since such symptoms of anxiety and tension can detrimentally affect performance, two things are needed: 1) awareness that one is tense, and 2) preventive or corrective treatment. Biofeedback testing, as conducted on Arias and Krickstein, is one way to determine one's unique anxiety patterns. Once these are known, Bollettieri recommends "single techniques, such as deep breathing exercises," to relax and clear one's mind as the occasion warrants. He states that such techniques have helped both Arias and Krickstein; this claim, however, requires further verification because no testimonials from the players are presented.

Bill Talbert, four-time U.S. men's doubles champion during the mid-1940s, once scored an extremely shocking victory thanks to his inadvertent exposure to hypnosis. Talbert entered a tournament in North Carolina, and had to face Bobby Riggs, then at the peak of his competitive game. He had never beaten Riggs in 32 matches, and figured there was no way to prevent loss number 33. However, a crazy sequence of events was to change Talbert's luck. In his book, *Bill Talbert's Weekend Tennis* (1970), he relates what happened:

The night before the match I was invited to a party that I intended to leave by ten or ten thirty in order to get plenty of sleep. But I was having so much fun there and my chances seemed so poor ("You in training for your thirty-third loss?" someone asked me), that I allowed myself to be persuaded to stay on—first until midnight, then one o'clock, then two... well, you get the picture. I arrived at the clubhouse for the match in my dinner clothes, never having been to sleep at all. In the car driving over, my friends from the party had practically hypnotized me by telling me over and over again, "You can beat him, you can beat him, you know you can beat him," and as I walked onto the court, light-headed and loose, that was the only thought my mind had room for. Bobby's usual psyching tricks were completely ineffective. I took him in straight sets, got a standing ovation, and his magic spell over me was broken.

Hypnosis is hypnosis, whether it occurs by accident or not. In Talbert's case, his all-night partying left him highly susceptible to any suggestions coming his way. He was on auto-pilot, and could not mentally resist his friends' repetitive commands to beat Riggs. Incidentally, this illustrates why salespeople often call you at night: they know you are tired from working all day, and therefore will be less able to fight their high pressure tactics.

Talbert's victory over Riggs certainly demonstrates the importance of the mental side of athletics. One tennis champion who realizes this is Billie Jean King, winner of 20 Wimbledon singles and doubles titles. She regularly practiced during her playing career what appears to be self-hypnosis. Tennis legend Pancho Segura states in his book, *Pancho Segura's Championship Strategy* (1976), "Billie Jean King will literally look at the ball for five minutes at night; she wipes everything else out of her mind and sees only the ball." Meanwhile, Eugene Cantin, in his *Topspin to Better Tennis* (1977), reports about King that "throughout the year before she won her first Wimbledon she spent five minutes every night repeating 'I can win Wimbledon!'" For the hypnotic state to occur a central focus of attention is required. The tennis ball King stared at served this purpose. Repeating "I can win Wimbledon!" was the hypnotic suggestion Billie Jean gave herself. It worked just as did the "you can beat him" suggestion given to Talbert by his

friends. (In fact, I strongly recommend such suggestions to any tennis player using self-hypnosis. Telling yourself "to win" provides a **drive, a killer instinct**—something so many tennis players lack. And there is nothing wrong with giving yourself this suggestion. After all, your opponent will gladly close out the match on you given the opportunity; so, return the favor.)

King's interest in mental training strategies is apparently not limited to self-hypnosis. According to teaching pro Bill Sheen, King also used a "stress tape" he has put out. Virginia Wade, 1977 Wimbledon champion, is supposed to have regularly listened to the tape, too, which makes sense because Sheen says she gave him the idea. The 22-minute cassette contains classical music, its purpose being to reduce tension.

L. A. Times staff writer John Weyler decided to look into the matter. He interviewed Sheen, who revealed how the tape's music seems to benefit one along both physical and mental lines:

"We did biofeedback tests with scans on the heart, body temperature and the brain," he said. "The results showed the music reduced the heart rate and body temperature and had a profound effect on the hypothalamus section of the brain, which controls the secretions of hormones from the pituitary. . ." "Most players tell me about a change in attitude," Sheen said. "The music tends to make one introspective and people become more aware of themselves. What often results is a more positive attitude."^[8]

Sheen's classical music "stress tape," which really should be called an anti-stress tape, is hardly a breakthrough idea. Champion weight lifter Russ Knipp, for example, said in 1977 that the Bulgarian Olympic lifters "use music as one form of concentration" (see Weightlifting chapter). In fact, music therapy has for some time been widely practiced throughout Europe.^[9] Even 800 years ago, the great Jewish physician Moses Maimonides, in his treatise *On the Causes of Symptoms*, written for his patron, Sultan Saladin of Egypt, advised the Sultan to lie down after eating breakfast, while "the chanter should intone with the strings and raise his voice and continue his melodies for an hour. Then, the chanter should lower his voice gradually, loosen his strings and soften his melody until he (the Sultan) sleeps deeply, whereupon he should stop." Added Maimonides, "Physicians and philosophers have already mentioned that sleep in this manner, when the melody of the strings induces sleep, endows the psyche with good nature and dilates it greatly, improving its management of the body."

You might wish to experiment on your own with soft classical music. It is not difficult to concoct your own anti-stress tape; but, if you want to avoid the effort, there is always Sheen's tape and others like it; still a good investment. No matter what you decide, it certainly would not hurt to incorporate calming music into the time you set aside for mental preparation for your upcoming competition or workout. Besides this, you may be wise to listen to such music during other periods of the day, for more and more evidence suggests that the employment of anti-stress measures is indispensable for survival in Western society. According to Dr. James Skinner, a Baylor University neurophysiologist, stress is what usually causes heart attacks, not clogged arteries. We note this pertinent section in the November 10, 1978 *L. A. Times* article, "Stress Alone Can Kill, Expert Says":

Skinner said his Houston laboratory blocked the coronary arteries of a group of pigs, the animal whose cardiovascular system most resembles man's. Some of them had been subjected to physical and psychological stress, such as being placed in unfamiliar surroundings or receiving mild electric shocks to the skin. The stressed animals died within a matter of minutes. The animals not under stress did not die, even when the major blood supply to their hearts was blocked.

Explained Dr. Skinner, "We found that the psychological factor was necessary for the occlusion (blockage) of the coronary artery to produce ventricular fibrillation, the death-causing component of heart attacks." As Dr. Skinner further observed, "it may be that brain states alone"

are what triggers heart attacks. If so, this would help explain the puzzling circumstance of heart attacks striking people regarded to be in excellent physical condition. The pressures of modern society being what they are, Dr. Skinner suggests that science develop an “anti-stress pill” to help people deal with the situation. But, this development has already occurred. We can easily get through the day by utilizing meditation, calming music, and other proven stress combatters such as proper nutrition and daily exercise; such strategies as these make up the “anti-stress pill.”

All this is necessary to bring up because even some top athletes, presumably in peak physical condition, have suffered heart attacks. In tennis the most famous example is that of Arthur Ashe, who incurred a heart attack in early August, 1979, and underwent a quadruple heart by-pass operation the following December. One wonders if by 1979 Ashe had abandoned the meditation-like procedure he had used at Wimbledon in 1975. Whatever the case, meditation offers one approach toward reducing stress. Studies by Dr. Ronald Jenning and Dr. Archie Wilson, professors of medicine at the University of California, Irvine, verify this. Scott Moore, *L.A. Times* staff writer, reported that one study by Dr. Jenning and Dr. Wilson “indicated that those who practice meditation experience a decrease in the hormone cortisol—an indicator of stress—in their blood flow during meditation. Another study showed a decrease in blood lactate concentrations—another stress indicator—during meditation.”[11] Such studies are cause for optimism. They demonstrate that once we become aware of the stress factors present in our lives, we can do something to reduce or eliminate their negative impact.

Many tennis players are more interested in reducing their opponent than their stress level. This being the case, we must reiterate that hypnosis can be a particularly powerful tool for tennis players seeking improvement through mental means. Charlie Lundgren, a psychologist possessing a college tennis coaching background as well, discussed the technique’s advantages in a June, 1970 *Tennis* magazine article called “Hypnosis in Tennis.” The article assumes a question and answer format, and contains a lot of good ideas.

The first question Lundgren answered concerned the U.S. Davis Cup team: would hypnosis help them play better? Yes, Lundgren replied, because “even players of this high caliber have their off days, and some have definite weaknesses that break down under the tremendous pressure of international competition.” But, he continued, by using “hypnosis or autosuggestion, the player can be made to perform optimally most, if not all, of the time.” Lundgren’s conclusion therefore was: “hypnosis could help the members of the Davis Cup team or anyone else.”

Another questioner asked, “Do you consider it ethical to hypnotize athletes?” This is one of those recurring questions which can be best answered by turning the coin over, which is exactly what Lundgren did. He countered, “If an athlete has a physical impediment that is correctable, should it not be dealt with? Clutching (freezing, choking) is a mental impediment and should be treated in the same manner. Therefore I think it is quite ethical to treat the psychological problems of the athlete.” Lundgren drove his point home even further with this reasoning: “Because (the) mind controls all the functions of the body, if one accepts the *idea* that a tennis stroke is going to go off, it *will*. When confidence wanes, fear steps in to tighten the muscles and thereby ruin one’s performance. Why let such negative suggestions take hold?”

I always wonder about those people who claim that hypnotizing athletes is unethical. I seriously doubt that they themselves ever actively participated in sports. Otherwise, they too would have suffered at one time or another the humiliation of performing terribly before a large crowd—an inevitable disaster every full-time athlete has experienced. When this happens, all you want to do is hide; in fact, many athletes feel so bad they actually burst into tears.

Lundgren concluded his discussion by detailing how the tennis player can use autosuggestion (self-hypnosis) to improve his performance. His procedure definitely works, as we’ll shortly see by the example of one good college player. So, if you are into tennis, you might want to give

Lundgren's approach a try:

When falling asleep at night and when awakening in the morning, start repeating over and over suggestions such as the following:

1. My concentration on the court is intense and enduring.
2. My muscles respond perfectly and automatically to the commands of my mind.
3. My response will be most perfect on pressure points.
4. My eyes follow the ball and I see impact at all times.

Bob Payan, now a computer programmer, was the number four man on the University of California, Irvine tennis team in 1970 and 1971. Both those years Irvine won the small college division in tennis; the team possessed a powerhouse line-up then. Payan told me a most striking story about his successes using Lundgren's suggestions. Here is what he said:

In the summer of 1970 I drove a truck for my dad, from 5 in the morning to 3 in the afternoon. So, I had a lot of time on my hands for thinking things over. I put it to use because I had found an article on self-hypnosis for tennis in a tennis magazine. The article mentioned four suggestions to repeat, like "my eyes will follow the ball and I'll see impact at all times." There was one about concentration, one about pressure points (that you'll do better on pressure points). I know that when you go to bed, that's when your mind is most relaxed. So, I repeated each suggestion 10 or 20 times before I went to sleep. I also tried to do this as much as I could while driving the truck, because driving is boring. I did this especially if I had a tournament coming up, or if it was between the first and second weeks of the tournament. Then you know who you're playing; so, you can key on one guy and gear yourself for that match.

Anyway, that summer was the first summer I really enjoyed good success: I won three trophies in a row. For example, my third tournament was in Fullerton, and that was a great tournament for me. In the finals ("Open" division) I upset Greg Jablonski, who played number one for us at Irvine. I beat him, 8-6, 7-5. That was the best match I had ever played. I had a lot of adrenaline flowing, but was still loose, ready and fast.

The whole week before this match, when I was driving the truck, I repeated the four suggestions over and over; in fact, I was going crazy with that stuff. But, I was so determined that I'd just do it and do it. It paid off.

In general, before any tournament match that summer I'd lie down or sit down in some peaceful place, and repeat the suggestions a few times. Then, I'd walk onto the court, and say to myself a couple of the suggestions while I warmed up. This took my mind off being nervous, or off the situation. I mostly repeated the watching the ball suggestion, and also the "My concentration is intense and enduring, yet effortless" suggestion.

There is one special point in Payan's self-hypnosis experience we should keep in mind: he was able to give himself suggestions while warming up. Many people have the idea that you can only give yourself hypnotic suggestions if you are lying down with eyes closed. This perhaps might be the case with the beginner who is just learning self-hypnosis. Most regular practitioners of self-hypnosis, though, are able to give themselves suggestions under almost any circumstance. Payan, in just the short span of one summer, developed this capability. He did it on his own, which, given the effort, is something you too can accomplish.

Payan's success shows why there is little reason for one to learn self-hypnosis from a hypnotist; for you can easily learn the technique on your own (reading a book on the subject is a good way to go about it). As we observed, all Payan did was read a short article on self-hypnosis

which he found in a tennis magazine. He had some time on his hands, and decided to try out the article's recommended suggestions. Payan started playing great tennis, continued practicing self-hypnosis, and finished the summer with three trophies. It sounds very simple, and it is.

If you are beginning to think that almost any tennis player can benefit from using hypnosis, you have got the basic concept I am expressing. A well publicized story of nine Miami housewives, members of the David Park Class C team in a women's doubles league, is the best case in point I can make. As originally reported in the *Miami Herald* (December, 1977) and subsequently related in *Tennis* magazine (May, 1978), these ladies were hypnotized by Cheryl Weisberg, a hypnotherapist. The women's objective, of course, was to improve their play, which up to then had quite disgusted them. Once the ladies were hypnotized, Weisberg had them go through a simple visualization drill: "Imagine you're in a tennis game where you are at your peak. You're at the baseline. Imagine your eye on the ball. Step into the ball and follow through. You feel so confident. So strong." This visualization message neatly packages some very helpful hypnotic suggestions. Notice how these suggestions are similar to those Lundgren recommends. Most importantly, they proved equally effective.[12] The women players started cleaning up on their opponents—even those they had never beaten before.

Before long their David Park team took over first place. Said Marie Bursch, one of the players: "I played more relaxed and determined, and with confidence. In one match, we were down 5-2 in the first set but won 7-5, 6-3, and we had lost the last time to the same opponents. I believe that the hypnosis helps you concentrate on watching the ball and on your game, instead of watching what's going on at the other courts."

So, here we see ordinary C players using hypnosis, and playing like they belong in the B's. Unfortunately, though, an even more common sight is to see truly fine players not use hypnosis, and play like they belong in the C's. I discussed this problem with Glenn Bassett, coach of the UCLA men's tennis team, and author of *The Bassett Method*. Even though his team perennially contends for the NCAA title, and is comprised of the top college players in the nation, Bassett continually witnesses his players "choking." He told me:

My guys look super if they're playing a pro out here, or something like that. Then they get against someone who's poorer than they are, and they get very very excited and tight, tense, and can't do the job. And I see that all the time.

"Choking" is a mental, a "head" problem. Its conquest, therefore, can be accomplished only through mental means. There is no point in taking any more expensive lessons, or putting in additional hours of practice under the lights if mental toughness is your objective. Such sessions primarily concern themselves with the *physical* and *technical* aspects of the game; while valuable in their own right, they provide scant assurance that you will play up to your potential when the big match rolls around. Many experts, such as Coach Bassett, are coming to realize the limitations of such endless practice sessions. As Coach Bassett says, "Physically we're really accomplishing an awful lot. I think mentally—mentally we got a long way to go. And I think hypnosis is one of the ways to go; I really do."

There are other, though not necessarily better, ways to go besides hypnosis. Tim Gallwey in *The Inner Game of Tennis* (1974) presents his alternative. He advocates that the player allow his subconscious, which Gallwey calls Self 2, to take over during play. To achieve this Gallwey tells you to just "let it happen." Well, there is no question that the subconscious can direct your actions. However, it is something that does not "just happen." One's state of mind must undergo certain changes, such as the induction of areas of inhibition in the cerebral cortex, for the subconscious to come to the fore. Hypnosis brings about this required change in the cerebral cortex, and it does this much faster than most other mental means. In any case, Gallwey reports that many players have benefitted from his passive philosophy. Not all, however; and, as Coach

Bassett points out regarding Gallwey's inner tennis, "I've given clinics with him—you know, all that stuff is good. I think hypnosis would be a heck of a lot better myself."

Barry Tarshis, writing in *Tennis* magazine, found Gallwey's approach impractical, if not unworkable, for competitive situations. While playing a real match, Tarshis discovered that his conscious self, which Gallwey calls Self 1, could not be held in check. He relates:

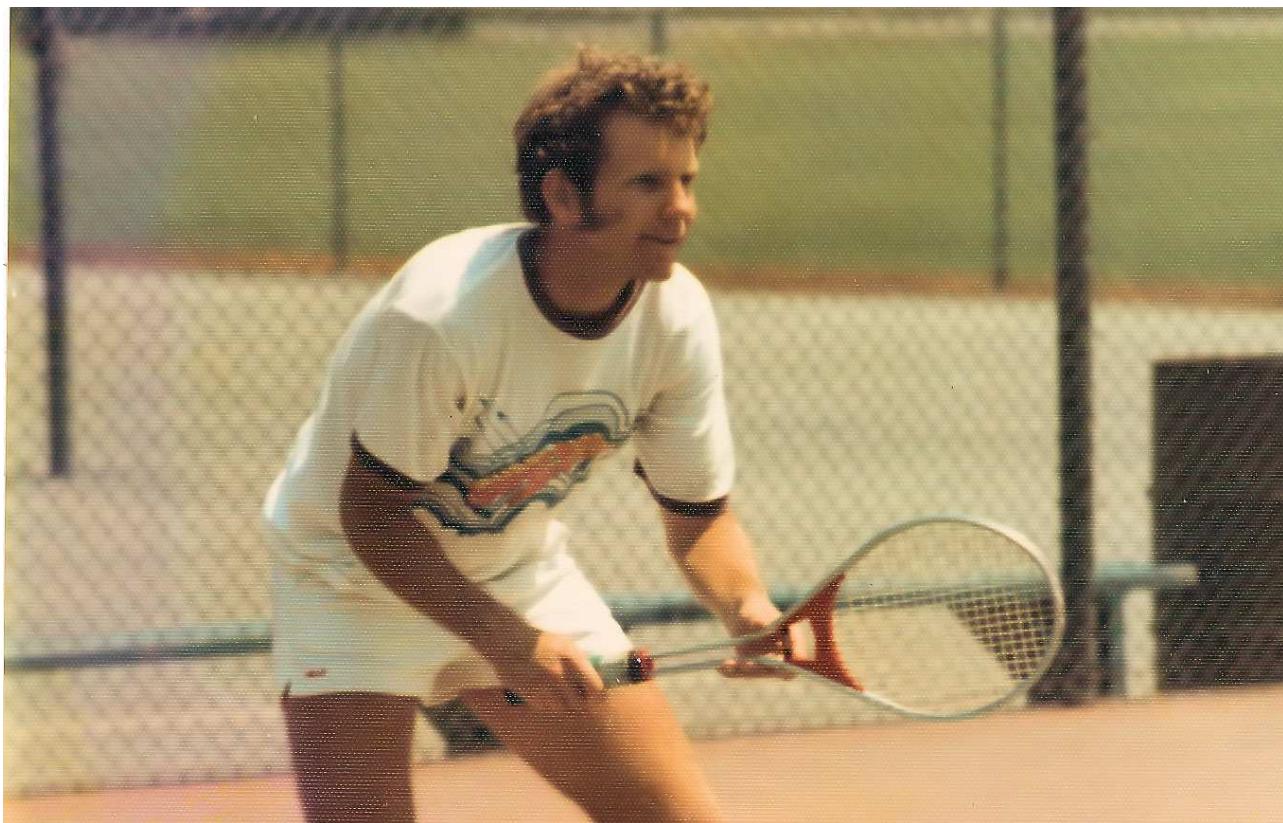
I found, for instance, that when I was simply rallying or hitting against a wall or with a ball machine, I could slip into an inner tennis groove without much trouble; my conscious mind was content to let things move along at their own pace. But once I got into an actual match, my Self 1 wasn't as cooperative. It cared. It wanted to contribute, to give orders, to control. And my efforts at keeping Self 1 out of the limelight were only occasionally successful. And after a while, I stopped trying—which is to say stopped trying not to try.[13]

Tarshis noted that "many people I've spoken with, who were initially turned on to Gallwey, have since abandoned inner tennis," also, he observed that "most of the tennis instructors who were using Gallwey's concepts have pretty much abandoned them. . ." The main reason for the exodus appears to be the difficulty players had in allowing the subconscious (Self 2) to assume control during a match. Tarshis contends that while playing tennis one has to deal with a huge amount of information: an opponent (often unpredictable and uncooperative), the nature of the game itself (one second you are serving, the next you are hitting a volley or groundstroke, etc.), playing conditions (it may be windy, sunny, hot, cold, all of which the player must compensate for), and so on. This enormous amount of information the mind must constantly process frustrates "let it happen" attempts to bring the subconscious to the fore. Says Tarshis, "Asking the mind to disengage itself from the goings-on in a typical tennis match is asking for the moon." My personal judgment of inner tennis is that the "let it happen" approach might work during competition if the player sits down between changeovers, closes his eyes, and clears his mind (with as little effort as possible). Constant practice of the technique *when play is stopped* might be the key. But, employing a passive mental approach during a point in a highly competitive match does not seem to be the appropriate time for one to tune in to his subconscious.

You cannot lose by trying out various mental rehearsal techniques. But self-hypnosis most likely will provide you your best results. This has proven to be so with me. Initially, I used self-hypnosis to study for tests while attending California State University, Fullerton. From my sophomore year through my doctorate degree I never scored lower than a "B" on any test. Before learning self-hypnosis, though, my mind sometimes would go blank while taking a test, and after a terrible struggle I would end up scoring a "C". The self-hypnosis, however, eliminated this problem. I would give myself suggestions such as "You will remember everything you study, and during the test recall **all** of it," and "You will be **completely confident and relaxed** while taking the test." These suggestions worked. My memory retention improved dramatically, and no difficult test questions could ever faze me.

But, it was not until much later that I applied self-hypnosis to my sports. It took an extremely disappointing performance during a tennis tournament for me to become enlightened. In early 1976 I was seeded number one in the B Singles in a respectable local tournament (the Eastern Tennis League Tournament, held in Fullerton, California). I had prepared hard for it, practicing my serve and other strokes for hours upon hours. Befitting my number one seeding, I drew a bye the first round. Meanwhile, I knew my first match would be a breeze; after all, two weak players were battling each other to determine who would face me in the second round.

Come the second round, my opponent and I were assigned the center court. A large crowd gathered to watch us play. Many of the spectators were potential opponents of mine in the tournament; they had come to size me up. This should not have bothered me—nothing should



(Kent Pagel photo)

Already a self-hypnosis master at age 21, as pictured here, Dr. Stevenson programmed himself with confidence-building and concentration-enhancing autosuggestions before important tennis matches. This led to intense, though not tense, play on his part—and plenty of victories. He is operating under the influence of autosuggestions in this photo of him, awaiting the serve of a tough collegiate opponent.

have bothered me! But, for some reason I proceeded to play about the worst tennis of my life.

During the whole match a gripping feeling enveloped my throat; I was literally “choking.” I could not swing through a forehand or backhand if you paid me \$1000. My potential opponents, of course, were delighted to see me play so poorly. Their laughter only added to my tightness. Fortunately, my opponent was mediocre enough for me to still defeat him, even though all I could do was dink the ball. The match took forever, however, and I was in a complete shambles as I walked off the court.

It was at this point that I resolved to use self-hypnosis for the balance of the tournament. I adopted a simple procedure. Before leaving the house for the match, I would enter the hypnotic state and give myself these suggestions: 1) “You will concentrate on **every point**,” 2) “You will hit every shot with **total confidence**,” 3) “Not only will you win, but you will win big!” and 4) “Absolutely nothing will disturb you.” Although it would not have been any problem, I did not give myself any reinforcing suggestions during my ensuing matches. Why? Because I did not have to. I wiped out everyone in straight sets, and claimed the trophy! The hypnotic suggestions could not have worked any better.[14]

When you use self-hypnosis for tennis, you really do not have to get fancy. You can give yourself reinforcing suggestions during a match if you want. But, it is quite sufficient to simply give yourself suggestions before the match. Here's why: 99% of your opponents do not engage in self-hypnosis or any other mental training strategy. But, because you do, it is almost like winning by default. Because you have given yourself some hypnotic suggestions beforehand, you are probably going to be much tougher mentally than your opponent across the net. The apt saying for this situation bears repeating: **You don't have to be very good to be best at something if you're the only one who's trying it at all!**

My successes using self-hypnosis prompted me to encourage many of my athlete friends and acquaintances to investigate the technique. They followed the same self-hypnosis procedure spelled out in the Introduction, and learned self-hypnosis with no difficulty; in fact, most attained the hypnotic state in a matter of minutes. Having accomplished this, the next step was to apply self-hypnosis to their own sport. Needless to say, those who were tennis players started playing substantially better, and chalked up surprising victories.

There is not space here to relate all the success stories (see Appendix 2 for other interesting accounts). Let me tell you about Paul Shaver, though. His testimonial illustrates well how junior tennis players can use self-hypnosis to tremendous advantage:

I learned self-hypnosis in December, 1976, and was 17 years old then. The first occasion I used self-hypnosis was during the Fountain Valley Tennis Club "A" Singles Tournament. I wanted to win this tournament really bad because it was my first "A" tournament in singles, and because winning it would be a big confidence builder.

Before my first match I sat on the bench at the side of the court and put myself under self-hypnosis. I then gave myself these suggestions: 1) to "go all out on every point," 2) to "never let up," and 3) I told myself, "You're better than him. You gotta win!"

This match went easy, especially since my opponent wasn't that tough. My opponent in the second round, though, tried to psych me out beforehand by boasting about some of his past victories and tournaments he had won. After we finished warming up, I put myself under self-hypnosis for a minute on the bench at courtside. This time I told myself, "You gotta win! This guy's a turkey." So, I just proceeded to beat him quite easily: 6-2, 6-1. He told me afterwards, "You never let me in the match!" Then the guy informed me that the man I'd have to play the next round would give me a cardiac arrest (he gave me the impression that I'd get my butt kicked).

The next round was the semi-finals (the next day at 8 in the morning), and my opponent turned out to be the second seed. He was a friendly man and a good player. For this match it was basically the same thing: I took my warm-ups and gave myself my regular suggestions. In the first set I had some bad breaks, and lost it, 6-4. After that first set I sat down on the bench and gave myself the suggestion to "**Kill!**" And that's what I did. I dominated my opponent totally, and took the second set, 6-1. The third set was a continuation of the momentum of the second set, and I won it, 6-3. I played really well, but my opponent always kept trying and was never psychologically out of the match.

The finals at 12 pitted me against the first seed, Bob Kisner, a middle-aged veteran of the courts. The crowd was for "the Kid" because Kisner would swear and throw tantrums on the court. I gave myself the usual suggestions before the warm-ups, the main one being, "You *know* you can *beat* him." During the warm-ups and start of play Kisner didn't say one word; instead, he gave me cold looks. In the first set we both played really tough. I was playing good, but just barely lost it, 7-5. The second set I

came out the same way, same attitude. Kisner also started this set playing well, but his game slowly deteriorated. I beat him, 6-3. At the end of this set my opponent blew up with combinations of swear words and racket throwing. In the third set I came out to win—I *had* to win! I started playing out of my mind. In fact, I played the best I had during the entire tournament. Meanwhile, Kisner was gone, as evidenced by the time he creamed the ball over the fence. I steamed through, 6-2. I was astounded by my victory, and the crowd was ecstatic!

Shaver, now an engineer, continued to use self-hypnosis, not only for tennis, but also in studying for tests while in college. His tournament story, though, is important because it exemplifies perfectly the value of self-hypnosis for junior tennis players. Shaver, then age 17, played tough tennis throughout, especially in his three-set matches. This is significant because juniors frequently “crack up” during the third set. Their relative immaturity makes them less able to handle pressure situations. As a result, they get upset quite easily, which seriously affects their play. But, as Shaver pointed out, it was the middle-aged opponent in the finals who blew his cool. By contrast, if you go to any juniors tournament, you will note that the youngster who keeps his head is generally the one who wins the match. The first racket thrown into the fence is a sure tip-off as to which player will not advance to the next round. As with Paul Shaver, proper hypnotic suggestions can provide you a mental toughness that is no strain to sustain. As you maintain your composure during the match, it becomes more likely that your opponent will ultimately degenerate into your typical “temperamental tennis player” (a plus for you).

Along these same lines, it can be said with justification that strategy books on winning tennis are not usually helpful. Those tips that make great reading go out the window as soon as you get *emotionally carried away* by your opponent’s quirks, or by the excitement of the moment. Remember Shaver noting his opponent’s silence and cold looks in the finals; to many players such actions would prove disconcerting, mind-blowing. It is the type of thing that causes one to completely forget his game plan. Paul Shaver, however, was able to shrug off this incident. He maintained his composure primarily because his mind was already preoccupied with the hypnotic suggestions he had given himself. His mind, in short, was totally focused in on winning, and no antics originating from his opponent could disrupt Shaver’s self-programming. There is a lesson to this: simple hypnotic suggestions will do more for your game than a study of the most fashionable tennis strategy books.

Shaver informed me that he enters the hypnotic state “by concentrating on my breathing, getting a slow rhythm. Then, I visualize that my muscles are relaxed, starting from my toes moving on up to my head. By this time my breathing is very shallow and infrequent, and I start giving myself suggestions.” This is Shaver’s at-home self-hypnosis procedure, and it takes him about two minutes to attain this extremely relaxed state. During a match, if he needs to, Shaver will give himself reinforcing suggestions between change of sides. The rules allow you a minute’s rest at this time. Says Shaver, “During that minute I sit down on the bench, and am able to go under.” I wondered what happened if he lost the match. “I never give up on a match,” Shaver claims. “If I do lose, the guy just beat me. But, mentally I was always in there.”

Shaver, while attending the University of California, Santa Barbara, successfully used self-hypnosis to get through difficult engineering courses. What he did is something every student might want to try: “In studying, I basically give myself suggestions to read the material, figure out the meaning of it, and perceive the whole perspective.” Shaver adds that “the high concentration level self-hypnosis provides helps me remember the material longer.”

We have looked at several easy-to-learn and easy-to-use meditation, self-hypnosis, and visualization procedures in this chapter. The tennis players who use them have walked away with more than their share of the trophies. Unless you are satisfied being a “choke artist” and

“perennial first-round loser,” perhaps you ought to try one of these mental training strategies. If you make this decision, you just might soon find yourself giving your opponents nightmares as you notch one victory after another.

FOOTNOTES

1. Bob Gillen, “The Power and the Passion,” *Tennis USA*, August, 1975, pp. 10-74.
2. “Wimbledon: Ashe Authors a Thinking Man’s Guide to Victory,” *World Tennis*, September, 1975, p. 30.
3. Rick Reilly, “Annacone Really Has Krick Upset,” *Los Angeles Times*, July 3, 1984, Part III, p. 1.
4. “Navratilova Records 7th Victory in Slims of Dallas,” *Orange County Register*, March 17, 1986, p. E3.
5. “Hana Mandlikova: The Most Misunderstood Pro,” *Tennis*, May, 1986, pp. 43-47.
6. “Think Success,” *World Tennis*, August, 1986, pp. 37-38.
7. “De-Stress for Success,” *World Tennis*, November, 1985, p. 80.
8. John Weyler, “‘Stress Tape’: Music to Calm Yourself Before the Big Match,” *Los Angeles Times*, August 30, 1979, Part III, p. 8.
9. “Music Wins Wider Acceptance as a Therapeutic Aid,” *German Tribune*, April 13, 1980, p. 12.
10. There is no question that this is so. Reporter Daniel Goleman of the *New York Times* described a study conducted by Dr. Dean Ornish, director of the Preventive Medicine Research Institute in Sausalito, California. The study, presented at the 1989 annual meeting of the American Heart Association, demonstrated, said Goleman, that “strict changes in diet and lifestyle not only can prevent heart attacks, but actually can reverse the clogging of the arteries... The study showed that a vegetarian diet, moderate exercise and an hour a day of yoga and meditation could produce a reversal of atherosclerosis, blockage of the arteries that can lead to heart attacks, in men and women who were strict in following the daily regimen.” Dr. Ornish offered an interesting insight, commenting, “We feel the lifestyle changes, like meditation and yoga, are as important as the dietary ones. The stress-control component is often ignored, but several studies show stress plays a major role in the development of atherosclerosis” (see “Study Finds Diet, Lifestyle Can Unclog Arteries,” *Orange County Register*, November 14, 1989, p. A1).
11. Scott Moore, “Meditation Seen as Improvement,” *Los Angeles Times*, December 17, 1978, Part XI, pp. 6-7.
12. In another article Weisberg provided additional details about the first part of the hypnosis session the David Park tennis players participated in (see “Can a Hypnotist Help Your Game?” *Miami Herald*, January 9, 1979). Informed Weisberg, “I had them lie around in a dark room. We did progressive relaxation exercises, starting with the big muscle groups. Once you get the body pretty relaxed, you can almost bet that the mind is pretty relaxed. When you get to that point, we try to build a channel of communication between the subconscious mind and the physical movement of the body.” At this point Weisberg introduced her visualization message and hypnotic suggestions to the players.
13. Barry Tarshis, “Is Inner Tennis Dead?” *Tennis*, January, 1979.
14. I decided while writing this book that it would behoove me to once more practice what I preach. So, I put self-hypnosis to the test again. In January, 1986 I entered the same tournament I had won 10 years previous. The two main suggestions I gave myself this time were “You will hit every shot with complete confidence” and “You will concentrate on every point”—suggestions virtually unchanged from the 1976 victory. Also unchanged was the bottom line: I won the tournament, though this time I had to overcome extreme physical fatigue to win a grueling 3-set final over a substantially younger and fitter opponent (Pete Stokke, my doubles partner). Psychologically, I dealt with the fatigue by giving myself reinforcing autosuggestions during the match, and they provided me just enough mental toughness to prevail.

**MENTAL TRAINING STRATEGIES TIME LINE
(BOXING)**

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Affirmations

(Muhammad Ali; Jack Dempsey repeated his during the fight)

Trains in Isolation, Away from All Distractions and Negative Influences

(Rocky Marciano went into isolation one month prior to the fight; Gene Tunney stopped reading newspapers)

Use of Visualization

(Rocky Marciano; Gene Tunney repeatedly fought Jack Dempsey in his mind years before they ever met, as did Mike Tyson before he fought Larry Holmes)

Regular Practice of Self-hypnosis

(Ken Norton gave himself auto-suggestions throughout training camp; only required 20 seconds to enter the hypnotic state)

Hypnosis Sessions

(See Community Activities' work with junior boxers; Jerry Quarry and hypnotherapist Nick Lewter; Ken Norton and hypnotist Michael Dean)

Use of a Suggestive System on Opponent

(See press conference involving Ken Norton and Duane Bobick)

Pre-fight Hypnosis Sessions

(Ingemar Johansson; Muhammad Ali had his at night while going to sleep, when the subconscious is very susceptible to suggestions)

Using Self-hypnosis between Rounds

(Nick Lewter helped Jesse Burnett develop this capability; being able to instantly hypnotize oneself a big advantage for the serious athlete)

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BOXING: FIGHTERS FAVOR HYPNOSIS AND VISUALIZATION

Talk to just about any athlete and he will claim that what is special about his sport is the enormous amount of concentration it requires. One sport where this sentiment definitely predominates is boxing. The fighter well knows that one mental lapse can mean instant defeat and possible serious injury. It is not surprising, therefore, that there are many examples of boxers using hypnosis, self-hypnosis, and visualization to enhance their mental sharpness and confidence in the ring.

The most unique story I have come across in this regard was told to me, in an April 13, 1979 interview, by the dean of sports hypnotists, Arthur Ellen. During his 50-year career, Ellen has worked with several professional boxers, including Ken Norton, former WBC heavyweight champion. According to Ellen, in 1949 Melio Bettina fought Gus Lesnevich for the light-heavyweight championship. Notes Ellen, "They called it the Battle of the Hypnotists. Two hypnotists working two fighters." Bettina's hypnotist was his manager, Jimmy Grippo, while John Scarny served as Lesnevich's hypnotist. You would think that a tremendous fight ensued because presumably both fighters were given effective hypnotic suggestions. However, this did not turn out to be the case. Lesnevich won—and fast! "The fight lasted one minute in the first round," relates Ellen, adding matter-of-factly, "Somebody had to lose."

We can make endless speculations about why the fight lasted but one minute: Lesnevich was given more effective hypnotic suggestions; Lesnevich was just lucky; each boxer's hypnotic suggestions cancelled out the other's, leaving the superior fighter to emerge victorious, and on we can speculate. But, this brings out a most important point. Any athlete's success is determined by several factors, only one of which is the ability to perform with confidence. We shall shortly look at the example of Ken Norton, a long-time user of hypnosis, who got knocked out early in two critical fights—fights for which he mentally prepared by employing hypnosis. His story shows clearly that hypnosis alone guarantees nothing. Other factors—such as, conditioning, strategy, proper diet, and most importantly, the opponent—can influence the outcome even more than one's possessing a positive frame of mind and good self-programming.

On balance, however, boxers who use hypnosis claim it helps them substantially. According to Arthur Ellen, for example, Ingemar Johansson contended that it was hypnosis which made him the heavyweight boxing champion.^[1] Praise for hypnosis has also come from amateur boxing quarters. The following extract, appearing in Vol. 82 of the *Bulletin* of the Association to Advance Ethical Hypnosis, indicates that teen-age boxers can "handle" hypnosis as well as derive significant benefits from it:

The *Oakland Press* (Nov. 28, 1978) relates that young boxers at Community Activities, Inc. are in an unusual training program. These aspiring Silver and Golden Gloves Champions are having sessions in hypnosis with Linda Atkins of the Hypnosis Center, Drayton Plains, Michigan. Their trainer, Dick Grable, and the parents of the boxers have only praise. Says Grable: "We have had state champs every year. . ." One parent, unsure of the program at first, thinks hypnosis had made her sons better boxers, does not think it is detrimental to her children and is considering continuing the hypnosis sessions beyond the boxing season.

Frequently, athletes' praise of hypnosis includes praise for the hypnotist they are working with. The testimonial of Jerry Quarry, former heavyweight contender, falls into this category.

After a 2 1/2-year layoff from boxing, Quarry attempted a comeback against Lorenzo Zanon in November, 1977. As reported by Jack Hawn of the *Los Angeles Times*, Quarry visited hypnotherapist Nick Lewter as often as was possible in the weeks before the fight. Stated Quarry, "Dr. Lewter has really helped me. He's put positive thinking in my mind and given me self-confidence. At times in the past, I've questioned the abilities that I had, as to whether I was really good enough to beat certain fighters that I was fighting. And, when you go in there with doubts, you've already lost the fight to begin with. He's taken that doubt out of my mind." [2]

So enthused was Quarry over the results emanating from the hypnosis sessions, he planned to have Lewter hypnotize him in the locker room right before the fight. Whether this took place or not, the bottom line was that Quarry knocked out Zanon late in the fight. This occurred only after Quarry had absorbed a lot of punishment throughout the rounds from his opponent. We search hard here for evidence of hypnosis transforming the athlete into some sort of superman, and find none. However, as Arthur Ellen observes, if nothing else, hypnosis at least can get the fighter into the ring; it certainly accomplished this with Quarry.

Besides Quarry, hypnotherapist Lewter has other clients who happen to be boxers. The public statements of two of these boxers echo the comments made by Quarry. [3] *L. A. Times* staff writer J. Michael Kennedy informs us:

On the other hand, there are those who swear by him (Dr. Lewter). One is Jesse Burnett, a light heavyweight boxer who is certain the treatments have done him good. Like Quarry, he is in the last of his fighting years, yet he thinks the Lewter treatment will be helpful.

Burnett started boxing when he was in prison, where he did seven years for robbery. He said he didn't have the extra effort needed to win before he met Lewter, but now does. He has had only one fight since undergoing the weekly hypnotherapy treatments, a bout he lost, but Burnett contends that was due to a hometown decision. "I said, 'I don't believe in this stuff. You can't hypnotize me.' The next thing I knew, I was relaxed." Burnett said he can now carry that kind of relaxation into the ring with him, going into what might look like a trance when he is in his corner between rounds.

Assuming Burnett's contention is true, that he can enter the hypnotic state between rounds to relax, that is quite an advantage. Such a capability would theoretically allow Burnett to give himself reinforcing and possibly new suggestions to help counter any change of tactics by his opponent. All things being equal, such flexibility would not only frustrate the opponent, but probably prove instrumental in defeating him.

The other boxer client of Lewter's who offered his hypnosis story to the *Times* reporter was Ted Sanders. His remarks are noteworthy because we see again evidence that physical conditioning needs to be linked with mental conditioning in order to totally maximize the athlete's potential. Stated Sanders, "I knew there was something in myself that could put out more, but it was like I was afraid to do it. Now, I'm not getting beat up. They can't believe the difference. I don't just put it on training itself. You've got to get the mind to do it."

The boxer who has been the staunchest advocate of hypnosis is Ken Norton. The former heavyweight champion has practiced self-hypnosis for years and worked with various hypnotists. Dr. Michael Dean was the first hypnotist to whom he turned for help. At the time Norton had won 15 out of 16 professional fights, but remained relatively unheralded in the heavyweight ranks. This was soon to change. In the April 4, 1973 *Los Angeles Times* article, "Hypnotist Credited With Helping Norton," Dean described his work with the boxer:

He came to me and said his arms get too tired to keep them up. He used to get tired in five or six rounds. I told him to rejuvenate himself. Through autosuggestion, when-

ever his arms get tired, he should step back out of the opponent's range, roll his shoulders, relax and think "I feel great, I feel great." Then he can come back and continue to fight.

For 2 1/2 years Norton linked up with Dean, and won 12 straight bouts, including his famous shocking victory over Muhammad Ali on March 31, 1973 (Ali suffered a broken jaw in this fight). As his first fight against Ali drew nearer, Norton prepared himself mentally by meeting daily with Dean for hypnosis sessions, some lasting as long as 45 minutes. In this instance the mental training clearly paid off. The victory over Ali proved the turning point in Norton's career, and established him for many years until his retirement in 1981 as one of the top-ranked heavyweights.

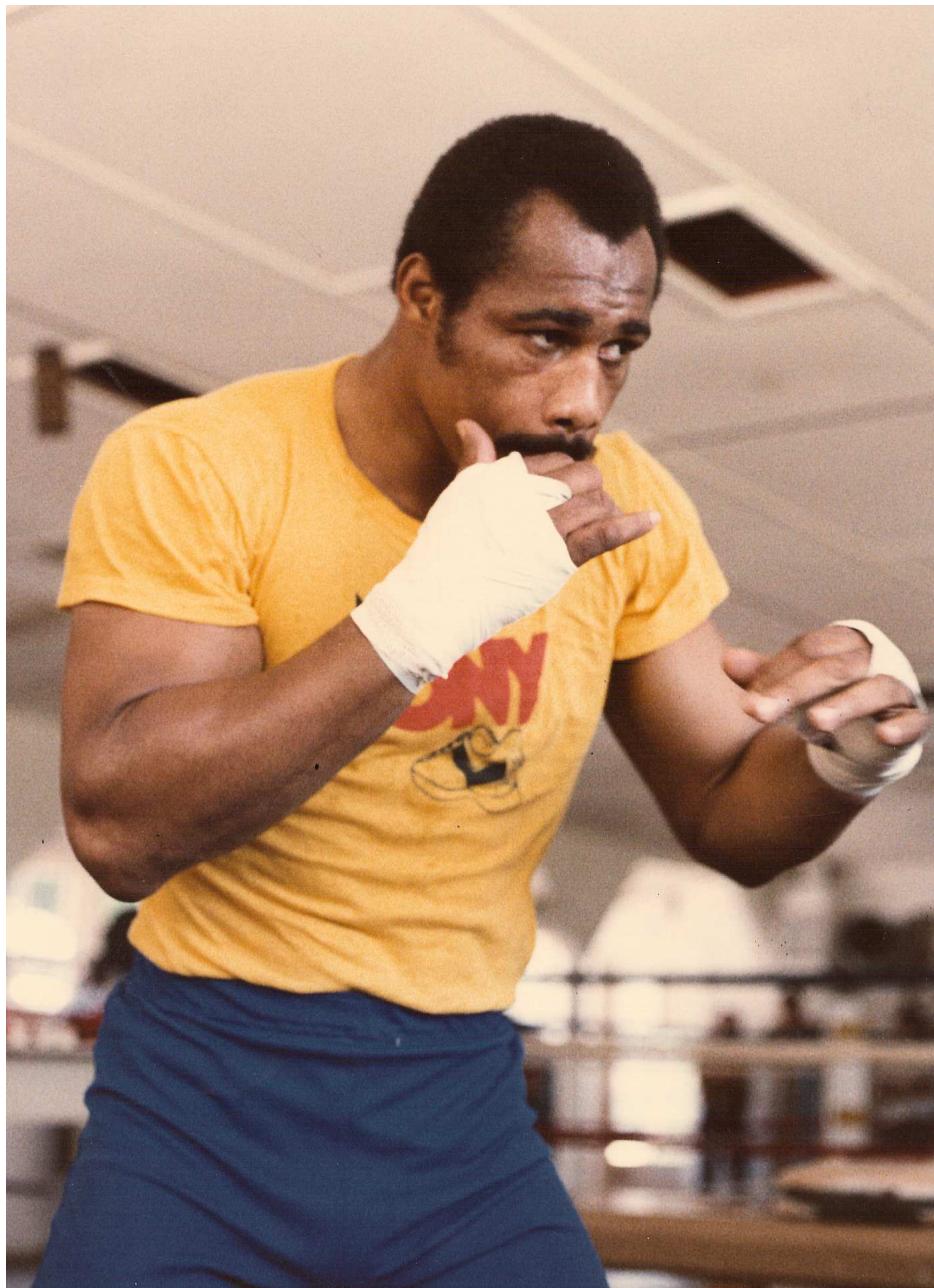
In the Ali fight, Dean claimed Norton followed his advice to "roll his shoulders, relax and think 'I feel great, I feel great'" whenever his arms got tired. According to Dean, "he also used self-hypnosis between rounds when he kept his eyes open and took deep, relaxing breaths." There is no question that any athlete who regularly practices self-hypnosis can develop the capability to put himself into the hypnotic state almost instantaneously. So, it is possible that Norton was able to use self-hypnosis between rounds and while actually fighting Ali during the round; that this might have occurred aroused my curiosity.

I talked to Norton on several occasions about his use of self-hypnosis, and he maintained that he did not go into a self-hypnotic state during his fights.[4] Said Norton, "You don't have time to stop and think during a fight. Everything's got to be conditioned reflex." What Norton says he did do was give himself autosuggestions during training camp. He noted, "By the time I get to the fight everything is embedded in my subconscious. Then, if an opportunity presents itself during the fight, it's an automatic reflex." Norton also estimated that it takes him 20 seconds to attain the autohypnotic state. This being the case, he could have conceivably given himself reinforcing suggestions during the minute's rest between rounds. During the round itself, however, such an attempt might prove quite difficult to pull off; the action usually would be too fast and too intense for one to give himself reinforcing suggestions. As Norton stated, "You don't have time to stop and think during a fight." This situation most athletes face—of not having enough time during competition to give themselves reinforcing suggestions—is not a serious problem; for any athlete who has received proper hypnotic suggestions before the competition begins will be more than adequately prepared mentally. Given such pre-preparation, the athlete will only rarely encounter a need for reinforcing suggestions during competition. Norton's procedure of using self-hypnosis while in training camp is therefore one which will work quite well the majority of the time.

After the Ali fight, Dean and Norton had a falling out, which eventually degenerated into a lawsuit filed by Dean. Dean's version of the rift appears in the March, 1974 issue of *Sport* (see "Hypnosis in Sports: How to Slip Into a Trance and Out of a Slump"). The dispute seemed centered around who was getting the most credit and publicity—the boxer or the hypnotist.

After Norton parted ways with Dean, he mainly used self-hypnosis to prepare for his fights. I once asked Norton what specific hypnotic suggestions he gave himself. He replied, "It depends on whom I'm fighting. It depends on what I think I need to do." Norton amplified on this later while discussing his November 5, 1977 victory over Jimmy Young at Caesar's Palace in Las Vegas. This victory, incidentally, ultimately resulted in Norton being declared champion (after Ali refused to fight him). According to Norton, he gave himself the suggestions "mainly 'to throw combinations to the body, stay in the body,' because I have a tendency to headhunt. Also, 'to try to avoid his right hand,' and 'to counter when he throws a right hand'—he's got a very quick right hand." These instructions are precisely what Norton carried out: he scored most of his points by hammering Young's midsection throughout the fight, and defended well against Young's right.

Against former Olympian Duane Bobick, Norton not only gave himself appropriate hypnotic



(Bob Stevenson photo)

Ken Norton, former world heavyweight boxing champion, often gave himself hypnotic suggestions while shadow boxing or skipping rope. A self-hypnosis adept, Norton says he did not have to lie down or sit down to give himself suggestions.

suggestions, but he also employed some brilliant pre-fight psychology on his opponent. Says Norton:

I used kind of a suggestive system against him. We had a press conference four days before the fight. I'm not one to say a lot. So, when they asked what I was going to do to Bobick, I said, "Bobick, I'm going to kick his ass. I'm going to tear his head off." And then I stopped right there. I didn't elaborate at all. And what this does, it gets into his mind, right? Right then he doesn't think about it; but, when he's sleeping at night, just before he goes to sleep it's going to filter out. So, I used hypnosis on him also.

Sometimes a little psychological guerrilla warfare against your opponent can go a long way, and is something to consider, especially if you feel secure about your own mental preparation. Norton ended up by knocking out Bobick in only 56 seconds, and clearly had it all together for this fight.

There were two other fights, however, where Norton seemingly had attained peak physical and mental condition, only for disaster to occur. The first reverse happened against George Foreman in a 1974 heavyweight championship bout. Before the scrap Norton explained how he was using self-hypnosis to get ready for Foreman:

Many times a day I repeat instructions to myself, and after a while they become conditioned reflex. Say Foreman pins me in a corner: I throw a hook or a right hand and spin out. Or say I get knocked down; I tell myself I won't rush right back in. I keep repeating these things, to get them embedded in my subconscious mind so when the time comes I won't have to think.[5]

Norton also claimed that Foreman would panic once he was hit on the chin, leaving Norton free to "hit him again, and again and again." As his comments indicate, Norton was certainly well prepared mentally for the fight. The only problem was that he was fighting George Foreman, who was then in top form and acclaimed as the hardest puncher in boxing history. Sometimes there are things which all the hypnosis in the world cannot overcome. Foreman provided convincing evidence why this is so, decking the challenger three times. Norton was counted out in Round 2. When I asked Ken what happened in the Foreman fight, he answered, "I lost it. He dropped me. No excuses." Nothing more need be added.

Norton's other debacle occurred against hard-hitting Ernie Shavers on March 23, 1979. The winner of the fight was promised a shot at Larry Holmes for the WBC heavyweight title. With those stakes on line it figured to be quite a battle. Once again, however, boxing fans were in for a disappointment. Shavers finished off Norton in 1:58 of the first round.

A few days after the fight Scott Ostler of the *L. A. Times* reported Norton's manager, Jack Cohen, as saying, "I could have sworn on a stack of Bibles his mental attitude was better than I'd ever seen."[6] In fact, before the fight Norton had called in Arthur Ellen to his training camp. Ellen hypnotized Norton, no doubt giving him hypnotic suggestions more useful than not. According to Ellen, the plan was for Norton to defeat Shavers and then Holmes for the title. After doing so, Norton would publicly announce he had been helped by hypnotist Arthur Ellen. This nice gesture would have given Ellen the recognition he deserved; it also would have enhanced the public image of hypnosis.

In any case, Shavers took care of the plan with a left hook to Norton's temple. Responding to my question about the Norton-Shavers fight, Ellen explained, "Hypnosis is not a panacea. It can give a guy an emotional advantage. You can get killed, too! You see, there are so many misconceptions about hypnosis that it's almost like 'Hey, he was hypnotized! How come he didn't win?' Like it's a panacea. What do people expect from the hypnotist? It's as if he's a spooky guy."

Norton talked to reporters about his loss to Shavers. His explanation touched on two areas.

First, Norton stated that he was in condition for the fight, but that Shavers “caught me with a high hook on the temple. I was surprised by his power.”[7] Just as significantly, though, Norton indicated that possibly he was not so mentally prepared as the evidence led one to believe. Related Norton, “I was getting to the point to where it was hard to get motivated, hard to train, hard to run, hard to stay in camp, hard to abstain from doing what I shouldn’t be doing. My conception is that if you really aren’t into it mentally, if you don’t train right and sacrifice, you take a chance on getting hurt.”[8] Norton also said that boxing had made him financially secure, which was “basically what I wanted.” As a result, he found himself developing other interests besides boxing.

It appears that for various reasons Norton was not up for the Shavers fight as much as he could have been. As Arthur Ellen speculated, “Maybe Norton used hypnosis to decide ‘Let’s get to hell out of it [boxing].’” Regardless of the degree Norton was prepared mentally and physically, let us not forget to give credit to Shavers, who was obviously ready and wanted to win.

If there is a lesson to Norton’s experience with hypnosis, perhaps it is this: hypnosis and other mental disciplines can help you perform up to your potential. How your opponent performs depends mainly upon his own mental and physical preparation. Sometimes your opponent will be strongly influenced by your performance, doing well because you are doing well. Quite often, though, he will perform even worse than usual because of a good effort on your part. In athletics many variables enter into the picture, making predictions about outcomes difficult. It is best, therefore, for you to concentrate on your own preparation, trying to maximize your own physical and mental potential. That way, if your opponent wins, it is because he is simply better or lucky—not because of any omission of yours.

The value of adopting this approach was brilliantly demonstrated by Rocky Marciano, the great undefeated heavyweight boxing champion from 1952 to 1956, who scored a record 49 straight victories in his division. In training for a fight Marciano went into a form of isolation, which resulted in the blocking out of all distractions and negative influences. Comments by Rocky’s opponents or others that might have unnerved him or created self-doubt in his mind never made it to his eyes or ears. Meanwhile, Marciano injected a positive element into his mental preparation; throughout training camp he used visualization, a close cousin to self-hypnosis. He constantly pictured in his mind: 1) his opponent; and 2) the tactics he needed to employ to defeat the other boxer. This intense use of visualization during training led to Marciano’s focus of attention come fight time being fixated on one thing only—winning. Rocky described his pre-fight mental preparation procedure this way:

The last month before a fight I don’t even write a letter. The last ten days I see no mail and get no telephone calls and meet no new acquaintances. The week before the fight I’m not allowed to shake hands or go for a ride in a car. Nobody can get into the kitchen, and no new foods are introduced. Even the conversation is watched. By that I mean that the fellas keep it pleasant, with not too much fight talk. My opponent’s name is never mentioned, and I don’t read the write-ups because somebody might write one idea that might stick in my mind... For two or three months, then, every minute of my life is planned for one purpose. I don’t even think about what I’m going to do the day after the fight, because that’s going to be like an adventure and exciting. Everything on my part and on the part of everybody else in camp is directed toward one goal—to lick the other man. I see him in front of me when I’m punching the bag. When I run on the road I’ve got him in my mind, and always I’m working on certain moves and punches that I hope will lick him. . . When you work and work like that with only one purpose in mind for weeks on end there’s only one thing you want to do—and that’s get out there and try it in a fight.[9]

The way Marciano went about preparing mentally for competition can hardly be improved

upon. By going into isolation while training, he prevented his opponent and others from psyching him out. For example, if he had fought Ken Norton, and Norton, at a press conference a few days before the fight, had boasted that he would "tear Marciano's head off," the comment never would have reached Rocky's attention. In fact, it is doubtful that Marciano would attend the pre-fight press conferences that are so commonly held nowadays before big fights; this is simply because he never wanted to give his opponents any opportunity to get an upper hand psychologically. The other thing that was so good about Marciano's mental preparation routine was the way he used visualization to practice the fight in his mind beforehand. The old saying, "Practice makes perfect," is true. Dr. Maxwell Maltz in *Psycho-Cybernetics* (1960) says psychologists have "found that if rats were permitted to *learn* and *practice* under *non-crisis* conditions, they later performed well in a crisis... People react the same way. Persons who have to learn how to get out of a burning building will normally require two or three times as long to learn the proper escape route as they would if no fire were present." According to Dr. Maltz, people who have not practiced what to do in a crisis situation try too hard; "the automatic reaction mechanism is jammed by too much conscious effort," he says, resulting in poor performance. Marciano avoided this fate. Under non-crisis conditions (training camp), Rocky endlessly practiced what he had to do to beat his opponent. He practiced this mentally—using the visualization—as well as physically and technically, against sparring partners. So, when the actual crisis (the fight) occurred, Marciano was able to think clearly and act correctly, because he had essentially been through it all before.

Dr. Maltz reports that Gene Tunney, heavyweight boxing champ from 1926 to 1928, used a visualization process over an extended period of time in preparing to fight Jack Dempsey, who had preceded Tunney as heavyweight champion:

Years before he actually fought Jack Dempsey in the ring, he had fought an imaginary Dempsey more than a hundred times in the privacy of his own room. He secured all the films of old Dempsey fights. He watched them until he knew every one of Dempsey's moves. Then he shadow-boxed. He would imagine that Dempsey was standing before him. When the imaginary Dempsey would make a certain move, he would practice his counter-move.

Tunney constantly visualized how he would fight Dempsey, but he did much more than that. Consciously or not, he often put himself into a trance-like state, generating seething, aggressive feelings towards Dempsey. In his book, *The Tumult and the Shouting* (1954), Grantland Rice relates how in 1925 Tunney was totally preoccupied with defeating Dempsey:

That winter in Florida I played golf with Tommy Armour and Tunney. Gene would hit his drive, toss aside his club and run down the fairway throwing phantom punches—left and right hooks—and muttering, "Dempsey... Dempsey... Dempsey."

"He's obsessed," observed Armour. "His brain knows nothing but Dempsey. I believe Jack could hit him with an ax and Gene wouldn't feel it. I don't know if Dempsey has slipped, but I'll have a good chunk down on Tunney when that fight arrives."

Despite Tunney's use of visualization and self-hypnosis, he almost lost the mental war to outside negative influences. Comments made in the press to the effect that Dempsey would win hands down worked their way into Tunney's subconscious. Tunney recalled how this happened, the comments' insidious effect on him, and what he did to correct the situation:

Dempsey was an overwhelming favorite to knock me out. The newspaper talk was that he would murder me. Being human I read the papers to find out what they were saying about me. One night, at the beginning of my long training period, I awakened suddenly and felt my bed shaking. It seemed fantastic. Ghosts or what? Then I understood. It was I who was shaking, trembling so hard that I made the bed tremble. I was that much afraid. . . afraid of what the great Dempsey would do to me. The fear was

lurking in the back of my mind and had set me quaking in my sleep. I pictured myself being mauled and bloodied by Dempsey's shattering punches; helpless, sinking to the canvas and being counted out. I couldn't stop trembling. Sure, the newspaper gossip was getting to me. Right there I had already lost the Dempsey fight before it was even fought. . . I got up and took stock of myself. What could I do about this terror inside me?

I could guess the cause. I had been thinking about the fight the wrong way. I had been reading the newspapers, and all they had said was how Tunney would lose. I was losing the battle in my own mind. Part of the solution was obvious. Stop reading the newspapers. Stop thinking of the Dempsey menace... his killing punch and ferocious attack. I simply had to close the doors of my mind to destructive thoughts and direct my thinking to other things. It took discipline.[10]

Like Marciano, Tunney ended up: 1) using visualization and related mental rehearsal techniques, programming himself to perform at his best, and 2) avoiding negative psychological influences from his opponent and other outside sources. Both of these should be done by all serious athletes. Failure to do the latter—avoiding outside negative psychological influences—can jeopardize all the good that visualization and self-hypnosis might accomplish. Remember, as an athlete interested in achieving your potential and defeating your competitors, you want only positive thoughts entering your mind. If possible, you'd like to see negative thoughts directed into your opponent's mind; however, it may not be worthwhile to attempt to psych-out your opponent if in the process you leave yourself open to being subjected to negative influences. So, the wisest approach is likely the one Marciano employed: isolate yourself before competition, and shoot positive thoughts through your mind via self-hypnosis, visualization, etc.

Muhammad Ali, perhaps boxing's greatest heavyweight champion ever, is yet another fighter we can mention in connection with hypnosis. Supposedly, Ali used hypnosis to prepare for his heavyweight championship rematch against Leon Spinks in September, 1978. This is the story at least which Bill Burt of the *National Enquirer* reported.[11] The *Enquirer* is known for its sensationalism; but, Burt's story contains credibility for many reasons, a main one being that the hypnotist involved was none other than Jimmy Grippo. Grippo, as we recall, served as Melio Bettina's manager, and was on the losing end of the Battle of the Hypnotists.

As related to Burt, Grippo sat at Ali's bedside for four nights prior to the fight, giving Ali hypnotic suggestions. According to Grippo, suggestions given the athlete just before he goes to sleep are ideal since "they're accepted by both the athlete's conscious and subconscious mind. Then the best that's in the athlete will come out." Grippo gave Ali several suggestions. Many were of a technical nature, useful only in boxing. Informed Grippo, "I could make them because I'm a former boxing manager." Others, however, were general suggestions, applicable to any sport. Some of the more noteworthy of these included:

- 1) "You will have complete confidence in yourself."
- 2) "Your will to win will be greater than ever."
- 3) "You'll have perfect coordination and reaction."

Ali, well past his prime at age 36, scored a convincing victory over Spinks. Compared to some of his other recent fights, Ali looked very good, moving and dancing extremely well. As Grippo observed, "he was able to go 15 rounds like it was 10 years ago." So, was it the hypnosis? Ali reportedly admitted that the positive thoughts Grippo had given him had, in fact, helped him. This at least is what Harold Conrad, Ali's public relations consultant, and Waddell Summers, the boxing editor for the *New Orleans Times Picayune*, heard Ali say.

Previous to the Spinks fight, Ali had relied on repeated recitations of his famous "I am the

greatest!" line—called an **affirmation** by sports psychologists—to prepare himself mentally for bouts. An affirmation is a positive attitude-building statement that one repeats at intervals to himself. Perhaps as age caught up to Ali, he found his "I am the greatest!" affirmation not proving as effective as it had been in his younger days, and this is why he turned to a mental discipline (hypnosis) that could better program his subconscious. Whatever the reason for trying hypnosis, Ali definitely appears to have profited from trying out the technique.

Jack Dempsey, the greatest boxer of the Golden Era of Sports, shot positive thoughts through his mind *during* each fight. It is insignificant whether we call this process use of affirmations, self-hypnosis, or self-talk (a term sports psychologists sometimes use to avoid saying the word "self-hypnosis"); all that matters is that it worked for the Manassa Mauler. Dempsey describes what he did:

To keep up my courage in the ring, I would give myself a pep talk during the fight. For example, while I was fighting Firpo, I kept saying over and over, "Nothing is going to stop me. He is not going to hurt me. I won't feel his blows. I can't get hurt. I am going to keep going, no matter what happens." Making positive statements like that to myself, and thinking positive thoughts, helped me a lot. It even kept my mind so occupied that I didn't feel the blows. During my career, I have had my lips smashed, my eyes cut, my ribs cracked—and Firpo knocked me clear through the ropes, and I landed on a reporter's typewriter and wrecked it. But I never felt even one of Firpo's blows. There was only one blow that I ever really felt. That was the night Lester Johnson broke three of my ribs. The punch never hurt me, but it affected my breathing. I can honestly say I never felt any other blow I ever got in the ring.[12]

Dempsey's best years were already behind him when he fought Tunney. Even so, one concludes from his testimonial that, despite getting beat up in his two defeats to Tunney, he never felt his opponent's punches—this occurring thanks mainly to Dempsey incessantly repeating positive thoughts to himself while in action. We have already seen how entering a relaxed state, in which brain-wave activity level is reduced, facilitates the subconscious's acceptance of new input (suggestions, ideas, etc.); however, Jack Dempsey's experience clearly shows that it also possible to remain "awake" and still successfully program yourself. Repetition, in this case, seems to be the key element.

An interesting contest for the IBF heavyweight boxing crown took place on September 21, 1985 between Larry Holmes, the reigning champion, and Michael Spinks. Spinks, constantly moving during the fight, won a unanimous decision. Holmes explained afterwards that "he [Spinks] wasn't that strong. He was just awkward. I couldn't get my right hand going, just couldn't get a shot."[13] Spinks provided a different theory about why Holmes, undefeated prior to the bout, could not get untracked, stating:

I hypnotized and mesmerized him [with a bobbing, rolling style]. I rolled, and whenever he was close, I went off on him.

During the fight Holmes' gaze seemed transfixed on Spinks' bobbing head, much like the way a subject's eyes follow the hypnotist's swaying pocket watch. We recall from the Introduction that a central focus of attention, when combined with relaxation, produces an inhibition effect in the cerebral cortex, bringing about the hypnotic state of mind. Holmes, by intensely concentrating on Spinks' jerky head movements (the focus of attention), could have unwittingly brought upon himself a state of mind approaching hypnosis, thereby slowing down his reactions and thought processes. So, far-fetched as it may seem, Spinks' "I hypnotized and mesmerized him" remark might contain a lot of truth.

Over two years later Holmes lost again, this time to the mentally tough WBC and WBA heavyweight champion, Mike Tyson. Tyson, then only 21 years old, told reporters a few days

before the fight that “when I was growing up, I always rooted for him [Holmes].”[14] More significantly, the young champion stated that “I used to shadow box and think I was fightin’ Larry Holmes. I always beat him, and there were no split decisions.” This positive visualization became a reality. Tyson knocked Holmes out cold in the fourth round of their January 22, 1988 bout. Other factors, such as Holmes’ advanced age (38), certainly helped determine the result as well; even so, it must be admitted that Tyson’s winning mind-set had to have influenced the outcome, perhaps serving as the final nail in the challenger’s coffin.

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The best endorsement hypnosis, visualization, or any other mental training strategy can receive is for the athlete to continue to use it *even after he loses*. Several of the boxers we have read about here have persisted in using their preferred mental rehearsal technique despite experiencing losses in the ring. Clearly, with these athletes mental training has passed the test, providing them the positive frame of mind required in the quest for peak performance.

FOOTNOTES

1. Johansson employed hypnosis to advantage in defeating Floyd Patterson for the heavyweight boxing championship on June 26, 1959. Dr. Huber Grimm, a Seattle physician and hypnotist, describes how Ingemar responded to a pre-fight hypnosis session (see “Hypnotized Cager Almost Beat Gaels,” *San Francisco Chronicle*, December 31, 1959): “While under hypnosis he (Johansson) was told that he would throw his right hand when there was an opening and before he was consciously aware of it. That’s why after the fight he was unable to say that he had spotted the opening before he threw the punch that knocked Patterson down the first time. It was so fast they had to stop the movies of the fight frame-by-frame afterward to see it.”
2. “Quarry Getting His Mind, Body Ready for Zanon,” *Los Angeles Times*, November 3, 1977, Part III, p. 1.
3. “Hypnotist Aims to Put More Punch in Clients,” *Los Angeles Times*, November 5, 1978, Part XI, p. 1.
4. Bob Stevenson, “Self-hypnosis for the Athlete,” *Hypnosis Quarterly*, Vol. 21, No. 3 (1978), pp. 11-16.
5. Dan Levin, “His Fight Plan Is a Planter’s Punch,” *Sports Illustrated*, March 25, 1974, p. 34.
6. “Loser Norton Gets Down but Only on Disco Floor,” *Los Angeles Times*, March 27, 1979, Part III, p. 2.
7. “Shavers Finishes Norton in 1:58 of First Round,” *Los Angeles Times*, March 24, 1979, Part III, p. 1.
8. “Loser Norton Gets Down but Only on Disco Floor,” *op. cit.*
9. Rocky Marciano, “How It Feels to Be Champ,” *The Fireside Book of Boxing*, (New York: Simon & Schuster, Inc., 1961), p. 275.
10. John D. McCallum, *The World Heavyweight Boxing Championship*, (Radnor, Pennsylvania: Chilton Book Company, 1974), pp. 130-131.
11. Bill Burt, “Hypnotism Helped Ali Destroy Spinks,” *National Enquirer*, October 10, 1978, p. 2.
12. Dale Carnegie, *How to Stop Worrying and Start Living*, (New York: Simon & Schuster, 1948), pp. 268-269.
13. “Spinks, Not Holmes, Makes Boxing History,” *Los Angeles Times*, September 22, 1985, Part III, p. 1.
14. Earl Gustkey, “Holmes Will Be Fighting Age and Odds Tonight,” *Los Angeles Times*, January 22, 1988, Part III, p. 1.

MENTAL TRAINING STRATEGIES TIME LINE

(BASEBALL)

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Listening to Baseball Hypnosis Tapes

(Bill Little's customized tapes also incorporate visualization, as do the ones put out by Bruce Bain and Dr. Gawain)

Hypnosis Sessions

(See hypnotist Arthur Ellen's work with the Angels, several of the Dodgers and other major leaguers; hypnotist Harvey Misel's work with Rod Carew, Bill Buckner, and other professional ballplayers; Lee Fisher; Dr. Conn; Coach Hertz hypnotizing his team; Peter Siegel)

Use of Transcendental Meditation

(Willie Stargell, Ted Simmons, Larry Bowa, and others)

Practicing Visualization

(George Brett did this for eight games in 1980 while out of the line-up with a wrist injury; went 6 for 12 upon his return and felt he had "not been away;" Wade Boggs constantly pictures himself making the "perfect swing")

Self-hypnosis Sessions

(Ruppert Jones; George Foster; Dave Collins; Dennis Lamp averaged two sessions a day)

Rituals to Enhance Concentration

(Wade Boggs does wind sprints at the same time before each night game, draws *chai* sign in batter's box when he steps in, etc.--these help maintain his focus)

Performing while Under Self-hypnosis

(Dennis Lamp employed a "key word" to put himself in this state of mind; used heavy doses of self-hypnosis to earn an 11-0 record in 1985)

BASEBALL: PLAYERS SCORE WITH MENTAL TRAINING STRATEGIES

It is well known that professional baseball players nowadays receive tremendous pay, with the best players acquiring a celebrity status that can become a downright hassle. Everyone from the press to autograph seekers grabs for a piece of their time. In spite of these numerous distractions, today's ballplayer somehow must concentrate on playing the game. He must put out of his mind such things as his upcoming contract negotiations and speaking engagements. This is not easy to do. So, many ballplayers turn to hypnosis, visualization, and meditation to help focus in on the primary task—which is to play excellent baseball—and tune out everything unconnected with the game.

The use of hypnosis by baseball players provides us an interesting history. Long ago David Tracy came out with two books, *The Psychologist at Bat* (1951) and *How to Use Hypnosis* (1952), in which he tells of his experience as team hypnotist for the St. Louis Browns. Supposedly, Tracy had successfully employed hypnosis on the New York Rangers hockey team and the St. Francis College basketball team. However, similar results with the Browns were not to be. Hypnotist Arthur Ellen, who has worked with many baseball stars, informed me what happened:

They had a guy once with the St. Louis Browns, Dr. Tracy. He promised the St. Louis Browns they'd come out on top of the league. So, the management hired him. Except the son of a bitch never was able to hypnotize anybody. He was so arrogant and smug that he never established a rapport with the guys. He got the job, but he couldn't hypnotize anybody. They wound up in last place anyway. Because they had no team.

Not surprisingly, Dr. Tracy's account of his work with the Browns differs from Ellen's. He says in his book, *How to Use Hypnosis*, that he helped many of the players:

If I saw that fearful imagination, nervousness and tenseness at the plate were hampering a man's batting ability, I would hypnotize him privately in my room before a game. While he was under hypnosis, I would tell him that when he came up to bat, he would be completely relaxed mentally and physically, with an irresistible desire to drive that ball out of the park; that he would have perfect confidence in himself, and would slam into the ball with every bit of power in his body. This method proved very successful with Owen Friend of the Browns and a number of other ball players, not only at bat but also in their play in the field.

Tracy provides no specifics, aside from his mention of Owen Friend. We do not know how much players' batting averages increased, how many less errors they committed, etc. after they participated in hypnosis sessions with Tracy. Also, none of the Browns Tracy worked with are quoted. Tracy does, however, hint that his working relationship with the players was not ideal. He admits, "To a limited extent I helped many rookies on the Browns when I was with them and if I had been given freer rein, I could have helped much more." What the "if I had been given freer rein" comment means, we gain no clue from Tracy. When all the evidence is considered, Tracy's account has to be taken with a grain of salt.

One reason I am an advocate of self-hypnosis is because you are your own hypnotist, you know yourself and trust yourself. Lack of rapport is therefore no problem. For hypnosis to be effective, a trusting relationship must exist between the person being hypnotized and the one doing the hypnotizing. Apparently, this trusting relationship, or **rapport**, might not have existed

between Dr. Tracy and the Browns; were this the case, hypnosis could not have been of much benefit. Even if Tracy established rapport with the players, it is questionable whether the Browns would have significantly improved upon their last place finish. As Ellen noted, "they had no team." Hypnosis can help in many ways; but, it cannot make up for any substantial lack of ability and talent.

A classic baseball hypnosis story appears in Arthur Ellen's book, *The Intimate Casebook of a Hypnotist* (1968). Leo Durocher, while manager of the New York Giants, brought his pitching ace, Sal Maglie, to see Ellen. Maglie had missed several starts because of a painful hip. Upon discovering he was to be hypnotized, Maglie got angry; but, Durocher persisted, and his pitcher at length relented. Ellen hypnotized Maglie, and then told him to respond to Durocher's voice. Taking his cue, Durocher told Maglie to do a duck walk. This he did, showing no discomfort. Seeing this, Ellen determined that Maglie's hip problem was of psychosomatic origin. Were it a true physical disability, Maglie could not have duck walked, no matter how willing. Ellen accordingly told Maglie that his hip would not bother him anymore because there was nothing physically wrong with it. The next day Durocher started Maglie, and he responded by pitching a shutout.

It is Ellen's opinion that 90% of the patients in hospitals do not belong there, because there is nothing organically wrong with them. Along these lines, many athletes believe they are injured when in reality they are merely bringing on pain through their emotions. This proved to be the case with Maury Wills of the Los Angeles Dodgers, who early in 1963 came to Ellen complaining about his legs. Wills had set a major league record of 104 stolen bases the previous year. Ellen hypnotized Wills, and while in this state Wills admitted several fears. The '62 season had taken its toll on Wills' legs, and he was not looking forward to another season of pain. Mainly, Wills was afraid he could not play if anything happened to his legs. Once again, Ellen recognized that Wills' apprehensions and leg pains were primarily the product of emotions. Telling him he would feel no pain, Ellen had Wills do a sequence of leg exercises. Like Maglie, Wills completed the exercises feeling no pain. Ellen then explained the situation to him, how he had been overprotecting his legs through needless worry, and gave him a hypnotic suggestion to realize that this was the case. When Wills awoke, he felt great, and walked out of Ellen's office with a smile on his face. He subsequently enjoyed a fine 1963 season, leading the league again in stolen bases and batting .302.

Through hypnosis thousands of people are currently obtaining the same seemingly miraculous elimination of pain Wills and Maglie experienced. For example, the *Los Angeles Times* reports that more than half of the pain clinic patients in the Walter Reed Army Medical Center are hypnotized regularly instead of being put into a stupor by drugs, the usual treatment; in addition, it was also pointed out that across the U.S. patients suffering from terminal cancer, cerebral palsy, and other diseases are gaining welcome relief from pain via hypnosis.[1]

Such cases are not really news, however, to those familiar with the history of hypnosis. Since its official discovery in the late 18th Century by the German physician, Franz Anton Mesmer, hypnosis has alleviated the suffering of millions. In fact, before nitrous oxide (laughing gas) came into widespread use in the mid-19th Century, hypnosis served as the general anesthetic for operations. The work of Dr. James Esdaile, who performed hundreds of operations on Hindus in India, exemplifies this. Basically, Esdaile's procedure was to hypnotize his patient, and then conduct the operation. The various operations performed included such surgery as arm and leg amputations, removal of cataracts, and cutting out tumors. In his report to the Royal Academy of Medicine in England, Esdaile noted, "I have seen no bad consequences whatever arise from persons being operated on when in the trance." He added that "cases have occurred in which no pain has been felt subsequent to the operation even."

Obviously, if hypnosis can alleviate the pain of the operating table, common sports injuries

should be a piece of cake for the hypnotic treatment. We learn that this is the case the majority of the time, although there are exceptions. I remember a chance encounter with Lee Fisher in April, 1978, who ran a baseball instruction camp in Calimesa, California. Fisher told me he was using hypnosis on Andy Messersmith, then a pitcher for the New York Yankees, hoping it would help Messersmith get over his arm problems. I followed Messersmith's career closely thereafter, half-expecting a remarkable comeback. Unfortunately, Messersmith never came close to regaining the fine form for which he was once noted. His arm, therefore, must have been pretty bad off. As we know, in such situations all the hypnosis in the world will not help.

While hypnosis may cure the athlete suffering from an apparent injury, its main utility is in the boosting of confidence and concentration. For example, left fielder George Foster, former Cincinnati Reds star, nearly quit in frustration during the '73 season. But, Foster did not hang it up, the *Associated Press* informing us why:

The Reds shipped him back to the minors at age 25, after a disappointing trial. His confidence shattered, he sought counsel with a hypnotist.

"I went to him as a last resort. I had to regroup. I had to do something to regain my confidence. He helped change everything around. That summer was the turning point of my career."^[2]

The Reds brought Foster back up, and in 1975 he replaced Pete Rose in left field, with Rose moving to third base. Two years later in 1977 Foster hit 55 home runs, and was voted the National League's Most Valuable Player.

After his return to the majors, Foster may have continued to visit the hypnotist who initially helped him. Whether the case or not, reports later emerged that Foster was practicing self-hypnosis daily, making himself his own hypnotist. In an article called "The Hypnotic Hitter," which appeared in the October 3, 1977 issue of *Newsweek*, the Reds slugger stated:

I believe that everyone should take ten or fifteen minutes a day to recharge, to reinvigorate himself, a time of insight and introspection. I project my thoughts into the situation that I'm going to be in later, so that I'm prepared. Then, nothing surprises me, because I've been there before in my mind.

In the same article catcher Johnny Bench called Foster "a very disciplined hitter," one who "concentrates as well as anyone at the plate." This, of course, is how we would expect the ballplayer using hypnosis to appear—really into the game. Now, some people will explain away Foster's enormous success, which happened only during the time he used hypnosis, as mere coincidence. But, such an explanation is simply not convincing. It is one of those explanations which says nothing and requires little effort to make. Claiming that coincidence was responsible for the success of Foster, and other athletes who have been helped by hypnosis, is merely the lazy man's way of explaining a phenomenon he either does not understand or does not wish to acknowledge.

Foster's teammate at the time, right fielder Dave Collins, also tried self-hypnosis. Collins was interviewed by Tony Kubek of NBC before the third game of the 1979 National League Play-offs, and the Reds right fielder stated he had learned self-hypnosis from Lee Fisher during the pre-season. "I think it's been hyped up a little too much," Collins remarked, though he acknowledged that the self-hypnosis had helped his confidence and concentration.

Some more examples of hypnosis helping professional baseball players regain confidence were presented by Marty Bell in *Sport* magazine.^[3] Bell chronicled the positive experience with hypnosis of many ballplayers and athletes in other sports. One player who dramatically benefitted from hypnosis was center fielder Paul Blair of the Baltimore Orioles, who had been struggling at the plate for three years. Blair visited Dr. Jacob Conn, a psychiatrist, on June 15, 1973. Dr. Conn

hypnotized Blair. Then, while Blair was in the hypnotic state, Dr. Conn had the Orioles center fielder "review his experiences when he was the best hitter around." Continued Dr. Conn:

Then we spent some time recalling his hitting against the better fastball pitchers in the league and he realized that he had often hit the inside fastball. He realized that if he had hit the best pitchers' inside fastballs in the past, there was no reason why he should not be able to now.

After the hypnosis session, Blair hit over .500 the next two weeks, and finished the season batting .282 (which was 48 points higher than his '72 average). During Blair's 2-week hot streak he also reportedly used self-hypnosis. But, this is only partly correct. The Orioles outfielder actually was carrying out an ingenious post-hypnotic suggestion Dr. Conn gave him; this suggestion instructed Blair to daily enter the hypnotic state on his own. As Dr. Conn tells it, "I then gave him a post-hypnotic suggestion. I told him to go home and find a spot and to concentrate on that spot every day. And then, when he reaches a state of heightened concentration, I told him to go over his good hitting experiences in his mind." This Blair did, achieving the impressive results already noted.

In 1975 pitcher Burt Hooten benefitted from a trip to Arthur Ellen. The Chicago Cubs had recently given up on Hooten, trading him to the Dodgers. Soon after joining the club, Hooten was approached by outfielder Willie Crawford; Crawford suggested to the pitcher, who was close to being sent down to the minors, that he join him in a visit to Ellen. Hooten decided he had nothing to lose and tagged along. Ellen hypnotized both players, spending 20 minutes with each. Hooten came away from the session virtually a new pitcher. He relates what occurred in Ellen's office:

I was a bit skeptical. At first I didn't think anything would happen. He was standing in front of me and said, "Okay, now I want you to close your eyes. I'm going to count to three and tap you on the forehead and you're going to fall forward. Don't worry. I'll catch you." I was thinking, sure you will. He counted to three and I fell forward. I was totally aware of what was going on, but I couldn't stop.

Soon he had me doing all kinds of things, like holding my legs straight up for five minutes. If you've ever tried to do that, you know how tough it is. When I walked out of Ellen's office, I felt the world was off my shoulders. I felt relieved and relaxed.[4]

After his trip to Ellen, Hooten pitched brilliantly, and in just two appearances earned a permanent position on the Dodgers starting rotation, where he remained for several years. Hooten had done other things besides hypnosis to improve himself. He had lost 25 unnecessary pounds, and had worked with Dodgers pitching coach Red Adams on his delivery. But, it is significant that Hooten did not put it all together until after his hypnosis session with Ellen. In fact, Hooten himself credits his comeback to Ellen. He recalls, "I was sure I could get hitters out while I was sitting in the dugout, but once on the field it was something else. The hypnotist turned it around. He rid me of all my negative thoughts."[5]

Pitcher Don Sutton, a 300+ game winner during his career, also had occasion to visit Arthur Ellen. During 1974, while with the Dodgers, Sutton at one point had not won in 14 starts. This clearly disturbed him, and rightly so. It was then that Maury Wills introduced him to Ellen. As Sutton told me in a May 20, 1978 interview, "At the time I went to Arthur Ellen I was really having trouble relaxing away from the ballpark." The subsequent hypnosis session with Ellen, said Sutton, "provided the impetus to go on, to perform successfully after that." This it certainly did: Sutton won 16 of his next 17 decisions!

I have encountered some ballplayers who were so reluctant to discuss their experience with hypnosis that they would not even talk to me; this despite the fact that their hypnosis experience was already a matter of public record. It would not be fair to reveal the identities of these players. However, since the mid-1970s so many athletes have gone on record about using hypnosis,

visualization, and other mental training strategies it should be no big deal to discuss the subject. Curious about this reluctance, I asked Sutton why some ballplayers do not want to talk about their use of hypnosis. He came up with three very logical reasons:

1) Some players believe that the hypnotist might exploit them; that is, the hypnotist is interested in them only to build up his own business and reputation. As Sutton noted, "It's very fashionable to hitch your wagon to a jock and say 'Hey, I made him what he is.'"

2) Many players feel that the public should care only about "the job we do *on* the field—not how we got to that point." In other words, these players regard the physical and mental preparation as nobody's business but their own. Besides, contended Sutton, "we are paid to provide leisure time entertainment—that's all! We're not paid to write secret life stories."

3) Some players do not like the kidding they get from some of their teammates over their use of hypnosis.

Sutton believed the first two reasons were the most important. Of course, his comments strictly apply to professional baseball players. And when we are talking about professional baseball, we are talking about a lot of money. We are also talking about a certain amount of loss of privacy for the player. He is now a public figure, a celebrity. The high stakes involved, the constant public relations' demands on the athlete's time, and so on, make for a highly-charged situation. The pressure at times must be unbearable. Under the circumstances, it is not surprising that some players develop an overly-protective attitude.

Sutton summed up his thoughts on the matter this way:

Who really cares what I do this morning to get ready for tonight? I'll tell you, the fans don't care! It's the sportswriters, the broadcasters who bring it to their attention; because they get bored writing about the facts about the game. It's easier to create a Hollywood setting for a baseball game than it is to write about double plays, groundouts, and sacrifices.

Sutton's perspective is realistic, and his contention that some hypnotists try to hitch their wagon "to a jock and say 'Hey, I made him what he is.'" contains validity. The following story may be said to illustrate this point.

Halfway through the 1986 season hypnotist Peter Siegel informed *Los Angeles Times* staff writer, Pete Thomas, that he was working with Sid Fernandez, a starting pitcher for the New York Yankees.^[6] According to Thomas:

Siegel works with Fernandez for about an hour before each of his outings, usually by telephone but sometimes on tapes, and believes that his work is partly responsible for Fernandez's achievements on the mound. "I don't take the credit for the success of my clients," he said. "But my influence in that kid's life is absolutely undeniable, and we keep working and we keep coming on strong."

That Siegel told Thomas about his work with Fernandez hardly surprises one because at the time Fernandez's record was an outstanding 12-2. When things are going great for a particular athlete-client, many sports psychologists will let the whole world know. However, whenever the athlete-client suffers reverses, the entire matter is often suppressed and completely swept under the rug.

Thomas reported that "according to Siegel, he [Fernandez] will get better." Predicted the hypnotist, "I think Sid will win between 20-24 games this season." When contacted by Thomas, Fernandez conceded that Siegel "gives me a load of confidence. He puts you in a relaxed state of mind and brings out what's positive in your subconscious." Despite this praise for the hypnotist, Fernandez made clear to the *Times* reporter that the pitcher himself deserved most of the credit,

stating:

Just because I know him [Siegel] doesn't mean I had a good year. I could have probably done it on my own, but he brought out in me what I didn't know existed, but what was in me.

After predicting that Fernandez would win 20-24 games in '86, Siegel rhapsodized at length about his client's newly discovered inner strength—"he can dig within himself and find out his true power," etc. These comments naturally aroused one's curiosity about the accuracy of the prediction. Did it come true? The balance of the '86 season saw the Mets pitcher post a 4-4 record, making his overall record 16-6—still excellent, but a far cry from the 20-24 victories Siegel envisioned. In the 1986 National League Championship Series against Houston, Fernandez started Game 3, but lost, 3-1. In the subsequent World Series against Boston, Fernandez only pitched in relief, but put in a strong appearance in Game 7, which earned him the Player of the Game award.

What we have in Fernandez's 4-4 second half record and his post season performance is a mixed bag. From 12-2 to just so-so, Fernandez appears to have slipped some as the season progressed, a contrary development to what Siegel told Thomas would occur. So, one wonders exactly what happened, whether Fernandez experienced arm trouble, discontinued his relationship with Siegel, or what. Perhaps, though, nothing changed. The pitcher might have just happened to have gotten off to a fast start thanks to a chance coalescence of favorable factors (such as his teammates providing him a lot of runs, the opposing batters in a slump, etc.); eventually, however, the law of averages caught up to Fernandez and things balanced out more. Many other plausible explanations can be cited. Additional information therefore is required before hypnotist Siegel's attention-grabbing hypothesis about why his client began the '86 season so well can be adjudged the most pertinent—or most *impertinent*.[7]

Hypnosis is not the only mental training strategy to which baseball players have resorted. Meditation at one time claimed several players as adherents, although the exact percentage of major leaguers who meditated is not known. In the late 1970s the Transcendental Meditation people put out a unique film, "The TM Program in Baseball," which shows one player after another giving his pro-TM testimonial (if interested in viewing the film, contact the Transcendental Meditation Program Center in your area). The film is part of the promotional effort the Transcendental Meditation people stage for new prospects who might sign up for the TM course. It does not show any of the players actually meditating; it just shows them saying how much TM has improved their athletic performance and general well-being. The players (and their respective teams at the time the film was shot) who gave their TM testimonial include: Larry Bowa (Phillies), Jim Lonborg (Phillies), Willie Stargell (Pirates), Bill Freehan (Tigers), Ted Simmons (Cardinals), and Del Unser (Mets). Meditation is not as results-oriented as hypnosis. It does provide internal peace and quiet, though; this in itself can be of tremendous value for players constantly in the limelight and subject to all sorts of pressures.

So far we have mainly talked about how individual players have used hypnosis and meditation. We mentioned early in the chapter the abortive attempt by Dr. Tracy to hypnotize the St. Louis Browns to a pennant. Another incident involving team hypnosis occurred in the summer of 1977 when Arthur Ellen was invited by the California Angels' management to work with the team.

The background to Ellen's invitation to work with the Angels is this. Nolan Ryan, the Angels' superstar pitcher back then, started the ball rolling to have Ellen visit his teammates. One reason Ryan did so was because he had gone to Ellen for help after losing confidence in his delivery; and, the resulting hypnosis session seemed beneficial. Ryan recalls his visit to Ellen: "I was so apprehensive about visiting him that I didn't get a completely positive reaction. I got enough of

one, however, that I knew I wanted to go back if the opportunity presented itself, which it hasn't." [8] The Angels, meanwhile, were in sad shape: they were experiencing a mid-season slump, way out of contention in fifth place. Ryan felt the root cause of the Angels' woes was their negative attitude. Explained Ryan, "I think a team can develop a losing attitude just as it can develop a winning attitude. I think there's a possibility it's happened here. And the mental approach is the big thing. At this level there isn't that much difference in physical ability." Ryan accordingly talked to general manager Harry Dalton, recommending that he ask Ellen out to speak to the team. Dalton went along with the suggestion, and called up Ellen.

Ellen, naturally, accepted the challenge. He arrived at the Angels' clubhouse, and just prior to the game proceeded to hypnotize the entire team, talking to the players for 25 minutes. After this hypnosis session, Ellen then worked separately with Don Baylor, the Angels' designated hitter. Baylor had experienced a terrible season, batting only .225. What happened afterwards in that night's game against Seattle forms the perfect ad for hypnosis. The Angels defeated the Mariners, 5-4, with Don Baylor hitting the winning home run! Nolan Ryan also pitched well, striking out 12, which broke Sandy Koufax's record for most games pitched with 10 or more strikeouts.

I asked Arthur Ellen about his hypnosis session with the Angels, and he strongly emphasized one point. Said Ellen, "I trust that you realize that the purpose is not to perpetrate a win—can't promise a win—but to expose certain individuals to a possible way to develop a positive attitude." Generally, if the athlete can develop a positive attitude, and all else remains equal, he will emerge victorious more times than not.

Ellen, in this case, simply introduced hypnosis to the Angel players. The players, having experienced the potentialities of hypnosis, could then follow up and learn to use hypnosis on a regular basis if they desired. The individual athlete must make the final decision whether or not to regularly use hypnosis, meditation, or similar mental rehearsal techniques; it is sufficient that the coach or management expose the athlete to these techniques.

It is also praiseworthy for a coach to urge his players, within reason, to understand and learn to use hypnosis. This coaching guidance I strongly recommend. No matter where the initiative to try hypnosis originates, keep in mind Arthur Ellen's advice that "the athlete should have an experience with hypnosis. Then he'll have some semblance, a greater realization of what it is." However, the athlete himself should determine whether or not hypnosis, or any other mental rehearsal technique, will become a permanent fixture in his training regimen and pre-game preparation. Forcing the athlete to use hypnosis against his inclination, possibly productive in the short run, usually backfires over the long run. No player will react favorably to a practice that does not fit his concept of propriety, or reality.

Despite Ellen's appearance, few of the Angels followed up on the hypnosis. This at least is what Rod Carew, the California Angels' first baseman from 1979 through 1985, intimated in an August 14, 1979 interview with me. Carew, the seven-time American League batting champion, used hypnosis regularly from 1976 on. He is knowledgeable about hypnosis and willing to discuss his use of the technique and its applications to athletics. Young ballplayers in particular should pay close attention to his comments.

Carew first turned to hypnosis during his '76 season playing for Minnesota when a leg injury seriously affected his play. He said, "I had had surgery on my right knee. But, even worse was that I had a real bad pulled hamstring. It was bothering me, and I couldn't really run." Carew's brother-in-law knew a Minneapolis hypnotist named Harvey Misel, and suggested that Rod see him. Despite initial reservations, he decided to visit Misel. Recollected Carew:

The first appointment I made with Harvey Misel, I was kind of fighting it. I didn't want to go under. So, he just told me to relax myself, and all of a sudden I found myself letting go. I just kind of dozed off into a nice sleep, really relaxed. I was out for

maybe 20 minutes although I felt like I was out for an hour and a half. It really felt good; I was so rested and relaxed.

What Harvey talked to me about was concentration and discipline—disciplining my mind not to worry. I was not to concentrate on the pain in the leg—just concentrate on going out there and trying to run as fully as I normally did.

So, I went into Milwaukee for a weekend series. I had stolen about 4 bases all season. Harvey had given me a post-hypnotic suggestion, telling me what I had to do to get myself relaxed if I felt myself getting uptight. I tried it, and I ended up stealing like 7 or 8 bases in the series. I didn't worry about the leg; I just started running the way I wanted to run.

While with the Angels, Carew visited Misel whenever California came to Minneapolis to play the Twins. He would also call up the hypnotist if he needed some reinforcing suggestions, and Misel would hypnotize him over the phone. This worked because, Carew informed me, "I've gotten to be a pretty good subject." How good? The estimate from Carew was that it took him about 10 seconds to enter the hypnotic state. We would expect this, as regular practice of self-hypnosis, or frequent sessions with a hypnotist, normally develops one's ability to quickly attain the desired state.

I asked Carew what type of suggestions Misel gave him—technical suggestions such as "swing level," or general suggestions such as "play with total concentration." Carew responded that Misel provided him general suggestions: "He tells me to visualize the ball, visualize the bat making contact;" also, "concentrate on the pitcher because he's the one that has the ball." Carew was a great hitter before he took up hypnosis in 1976. But, he enjoyed even more spectacular seasons afterwards, twice coming close to batting .400 for the whole season. Improved concentration at the plate seems to be the responsible factor. The batting champion contended when I interviewed him that Misel has "helped out my concentration so much I don't even worry about it anymore. I know how to concentrate now, which is an important thing in no matter what you're doing."

Carew disagrees with those who believe hypnosis is a crutch, a support for people who are not good enough to make it on their own. At the time of his leg injury, he felt that hypnosis "was something I needed. It wasn't a crutch." After hypnosis helped restore him to top form, Carew decided he would be smart to continue using it: "I thought that hypnosis would help me in the long run, help me during the course of a 162-game schedule." Whether or not hypnosis is a "crutch" is immaterial. The main thing is that it can help any athlete achieve his full potential, a point Carew clearly realized.

During the 1982 season Bill Buckner, then with the Chicago Cubs, felt he was not hitting up to his potential. Like Carew he turned to hypnotist Harvey Misel for assistance. Sports writer David Kahn relates the story:

On Aug. 1, Buckner was hitting .278 with 54 RBIs. For the average major leaguer, those numbers would represent a good year. But, for Buckner, a lifetime .296 hitter, those numbers were unimpressive.

"I asked myself (at the time), 'What the hell's wrong with me?'" Buckner said. "'Why am I popping up and hitting so many groundouts?'"

Enter Misel. Buckner ran into the hypnotist Aug. 2 at Cubs scout Eric Soderholm's baseball clinic in Chicago, although it wasn't their first meeting. In 1976, when he was with the Dodgers, Buckner went to see Misel for an ankle injury.

Although they were both guest speakers at Soderholm's clinic, the two ended up

speaking to each other as much as the kids. Buckner told Misel he was having troubles at the plate. Misel told Buckner that he would try to help him, and the 45-minute session was arranged. Buckner had been opening his front shoulder too much, so while he was hypnotized, Buckner discussed that problem with Misel, then they talked about the positive things Buckner wanted to do.

"The idea in baseball has always been to work, work, work on the physical part of the game and you'll succeed," said Buckner. "Baseball players have never really worked on the mental part of the game. But if you're not really confident. . ."

Buckner puts himself in the hypnotic state every time he bats by tapping his bat once on the plate. His eyes look into the pitcher and his mind locks into what he had discussed with Misel. Presto—no more pop-ups and few grounders.[9]

It turns out the grounders and pop-ups were replaced by lots of hits. Continues Kahn:

Since being hypnotized by Misel 27 games ago, Buckner is batting .413 with 35 RBIs. His average has taken a quantum leap of 30 points to .308. . .

Misel isn't taking all the credit for Buckner's success, nor is Buckner ready to give it. "Remember," Buckner said, "I won the batting title (in 1980 with a .324 average) before I met this guy."

But it's difficult not to connect the two, as Buckner admitted. "I'll tell you one thing," he said, smiling, "It (the hypnosis) hasn't hurt me any." [10]

Buckner finished the '82 season with a .306 batting average, which was much closer to his potential than the .278 he had been hitting before he tried hypnosis. Also, it is noteworthy that, as Kahn states, Buckner "puts himself in the hypnotic state every time he bats by tapping his bat once on the plate." This demonstrates that you can compete while in the hypnotic state—and compete commendably—as well as enter the hypnotic state with ease. Actually, what Buckner might have been doing was carrying out a post-hypnotic suggestion given him by Misel. Misel perhaps told Buckner during their hypnosis session to tap the plate with his bat every time he came up to hit, and that once Buckner did this he would focus in on what he needed to do to hit the ball right. What makes this a plausible interpretation is Kahn's statement that Buckner's "mind locks into what he had discussed with Misel." It is fairly insignificant whether Buckner employed self-hypnosis or carried out a post-hypnotic suggestion (also known as a post-hypnotic cue in instances of this sort). What counts is the hypnosis element, and it is this element which can help you maximize your athletic potential.

Two major leaguers unequivocally used self-hypnosis. One was outfielder Ruppert Jones, an All-Star in 1982 with the San Diego Padres, who became a regular practitioner of the technique. This was reported in an article by Phil Collier of *The Sporting News*. Collier offered this brief description of how Jones went about his self-hypnosis:

First, he decides in his mind what he wants to do. Then, he passes the message along to the rest of his body through the power of concentration. Finally, he just goes out, feeling confident, relaxed and completely prepared, and does it.

"Self-hypnosis is something I've been working at the past couple of years," he said, "but, like everything else, you get better at it with practice." [11]

Pitcher Dennis Lamp, when he played for the Toronto Blue Jays, took self-hypnosis to its limit. He developed the instant self-hypnosis capability—a capability which, as we discussed in the Introduction, provides numerous advantages to the athlete. Reporter Steve Rudman related in 1985 that "Lamp hypnotizes himself twice a day. Sometimes he even hypnotizes himself while he's on the mound." [12] Lamp's record in 1985 as a middle man relief pitcher was 11-0;

obviously, it is hard to perform any better. Lamp attributed much of his success to self-hypnosis, stating:

I have a key word I use to put myself under. I can't tell you what the word is, but I can put myself under in bed or on the bench. Then I visualize myself throwing correctly, thinking about the mechanics of pitching. There is no question that hypnosis is the most important thing I have going for me. It got me to the big leagues. Without it, my talent would not have been able to come through. I call it mental conditioning.

We noted previously that to acquire the instant self-hypnosis capability requires diligent practice. By hypnotizing himself twice a day, it is not surprising that Lamp developed this capability. Because he could put himself under at any time, Lamp had no need for a hypnotist, avoiding in the process the associated expenses and inconvenience. Karl Kuehl, player personnel director for the Oakland A's, who has worked with several major leaguers on their mental preparation, believes hypnosis is most beneficial when the player can employ the technique on his own, becoming, like Lamp, his own "mental coach." Observes Kuehl:

Hypnotism can help a player relax. It can help speed up the learning process. But you don't want a situation where the player is relying on the hypnotist. You want a situation where the player is in control of his own relaxation process. The idea is to get control to help himself.[13]

Kuehl's statement that "the idea is to get the player to help himself" falls in line with the purpose of this book. There are dozens of mental training strategies spelled out in this book for you to try. I urge you to study these techniques, and attempt to learn one or more of them. Then, apply the one(s) you have chosen to your sport and see what happens. If possible, rely on yourself, rather than outsiders, for your mental preparation. As Kuehl points out, "You want a situation where the player is in control. . ."

Although Jones and Lamp used self-hypnosis, most major leaguers who get involved with hypnosis tend to work with a hypnotist; and, the hypnotist who in recent years has seemingly attracted the most professional baseball clients is Harvey Misel. Because Misel has figured so prominently in opening up professional baseball to hypnosis, by among other things serving as a team hypnotist himself, we shall examine his work at length.

Most of Misel's pro ballplayer clients have been drawn to him by word of mouth. Rod Carew, for example, suggested to his teammate, Angels pitcher Mike Witt, that he visit Misel.[14] Witt had struggled to a 7-14 record in 1983, and decided in late April, 1984 to see if Carew's hypnotist could also help him. He went to Misel in Minneapolis, and like so many other novices to hypnosis was skeptical. Recalled Witt, "He turned off all the lights and put on this strobe light. I said, 'There's no way this is going to work.' But darned if it didn't."[15]

Witt claims the hypnosis session, in which Misel's main hypnotic suggestion was for him to "be mean," vastly improved his concentration:

I used to get up there and think, "If I walk this next guy, then they'll have guys on first and second with no outs and the next guy could hit a home run," and on and on. Now, I don't even see the hitter.

Witt followed up his hypnosis session with Misel by telephoning the hypnotist before his next two starts. Reinforcing suggestions were given Witt over the phone, and he proceeded to pitch complete game wins over Milwaukee and Seattle. Misel commented at the time to the press that he was attempting to use hypnosis to speed up the process of developing Witt into an excellent pitcher:

He wants to be the best he can be. We're trying to teach him things that might

otherwise take him five years to learn through experience. The key is in not being afraid of the hitters and having the intensity to make every pitch the best pitch he can possibly throw.[16]

Witt definitely made every pitch the best pitch possible in his final start of the '84 season. He threw a perfect game on September 30th against Texas, only the twelfth perfect game pitched in major league history. The success Witt experienced while working with Misel, however, was such as could seemingly be perpetuated only by a constant renewal of the partnership. In 1985 Witt began the season by losing his first three games. Concerned over his poor start, he once again contacted Misel, as well as hypnotherapist Lee Fisher (who, we recall, worked with Andy Messersmith). Explained Witt: "I'll eventually be able to maintain my concentration on my own, but I'm not at that point yet, and I need the reinforcement that I get from Fisher and Misel." Witt's experience with Misel illustrates well the fact that hypnosis must generally be practiced regularly for it to provide the athlete on-going benefits. By knowing self-hypnosis, the athlete can easily practice the technique at any time. But, by having to contact a hypnotist, as in the case of Witt, the athlete must go to some trouble and expense; the extra effort involved often results in the athlete neglecting to use the technique, only for him to experience regrets later on.

Working with a top sports hypnotist does not necessarily guarantee the athlete success. Reggie Jackson, for instance, sought Misel's help in 1983. "Yeah," says Jackson, "and I hit .194."[17] As the *L. A. Times* reported, "not everybody is enraptured with Misel's talents."[18] We do not know how many times and under what conditions Misel worked with Jackson; so, it is hard to say what went wrong. It may have simply been a one-time session which did not produce the immediate results Jackson was looking for. Meanwhile, White Sox outfielder Ron Kittle quit going to Misel after only two hypnosis sessions. Again, the reasons for this are unclear.

Though Jackson and Kittle apparently did not get much out of working with Misel, many other professional baseball players have. In 1983 White Sox outfielder Tom Paciorek was batting .240 at mid-season. He then saw Misel. By season end Paciorek's average had climbed 67 points to .307, and he hit .438 over the final 25 games. This turnaround was aided by Paciorek practicing hypnosis with Misel on a regular basis. Said Paciorek at the time:

I've been hypnotized now about six times. I still have to go up there (the plate) alone, but it has definitely helped me deal with two important areas of hitting—confidence and concentration. I can concentrate on hitting the ball rather than worrying about external distractions.

What he's doing really is reinforcing positive thinking, telling you how good you are and can be rather than how bad you are or were.[19]

Other White Sox teammates of Paciorek used Misel's services. In fact, the *L.A. Times* reported that "Misel was put on retainer by the White Sox after successful work with several Cubs." This retaining of Misel's services began in late June of 1983, which is when Paciorek first saw the hypnotist. The decision to hire Misel proved, at least in the short run, to be a good move by the White Sox management. Over the final third of the season the team hammered out the best record in baseball, and won the American League Western Division by 20 games.[20] White Sox pitchers Floyd Bannister and Richard Dotson had losing records before they visited Misel, but finished the year with 16-10 and 22-7 records respectively.

Misel's "successful work with several Cubs" relates to his helping Bill Buckner, Larry Bowa, and seven other players on the team. During the first part of the '83 season, the Cubs were in last place in the National League East. Misel began working with some of the players, and the players started producing, with the result being that the Cubs jumped into fourth place. As the Cubs jumped in the standings, so did the hypnotist's reputation. Quipped Misel:

Business runs in streaks, depending on how the players are doing. After I helped Larry Bowa his average went up to .312, and he hit three homers, which he never does. I've been lucky with the Cubs, so now all of a sudden I've got the magic touch.[21]

As of 1983, Misel's "magic touch" had led some 200 professional baseball players to contact him, each one paying \$100-\$125 per session, a charge which is not out of line with what other hypnotists seek. Now, professional baseball players can afford to spend this kind of money; and, for them it is a good investment (with contracts being so lucrative nowadays). Most athletes, though, would be wise to first learn self-hypnosis, which costs nothing to use, is highly effective, and can be done at one's convenience. If the self-hypnosis does not produce the desired results, then one can always lighten up his pocketbook by visiting a hypnotist.

Misel directs the Institute of Hypnosis in St. Paul, and apparently now concentrates on helping clients who are not professional athletes. This change in emphasis is revealed in a 1986 report by *L. A. Times* staff writer Pete Thomas, who related that Misel has "settled into a more private practice and is currently not involved with sports figures."[22] Why this development has occurred is difficult to determine without talking to the principals, but unconfirmed hearsay has it that many ballplayers Misel worked with were unhappy with his approach, which they deemed too heavy-handed; if such feelings were, in fact, generated, one can see how the disenchantment and associated negative fallout might have contributed to Misel's ultimate withdrawal from the scene. Regardless of the reasons, Misel's success with some of his ballplayer clients cannot be denied.

While still working with ballplayers, Misel occasionally flew to a particular city to help a client-player in need; in doing this he charged \$1000/day plus expenses, which made up for what he lost by leaving the Institute and his regular business. This high but understandable fee perhaps prevented ex-Dodger second baseman Steve Sax from hooking up with the hypnotist. Sax was committing lots of throwing errors to first base early on in the '84 season while playing for Los Angeles. He considered going to Misel to straighten out the problem, remarking, "I've talked to guys who have gone to him. Larry Bowa says he's great." But, the contemplated session evidently never came off. Misel partly blamed the Dodgers management for this; he felt they should have made sure Sax met with him, perhaps by even footing the bill. Said Misel:

What have they got to lose? If I had a piece of property worth a helluva lot of money that was doing nothing, if I had a chance to help it, without a downside risk, why shouldn't I do it? Hypnotism can only help him (Sax). It absolutely can't hurt him. There is no downside risk.

. . . Hypnotism doesn't give you any abilities you don't have. It won't make you faster or stronger. We just get rid of the mental obstacles.[23]

Misel, as he himself noted, did help former Cubs shortstop Larry Bowa. It is quite interesting that Bowa gave hypnosis a try because when he was with the Phillies, he was an advocate of Transcendental Meditation, appearing in the film, "The TM Program in Baseball." This would seem to indicate that by the '83 season meditation was not providing Bowa the lift he needed. Meditation primarily calms a person down, physically and mentally; and, in fact, Bowa's complaint was that "I hadn't been aggressive enough the last few years."^[24] So, Bowa took Bill Buckner's advice to see Misel. He summarizes his hypnosis session with Misel, and how it aided him:

No one can maintain total concentration every wakeful minute of his life, but this guy believes you should be able to concentrate eight-tenths or even nine-tenths of your time on the job. What he did was give me checkpoints to bring me back to concentration when I do start losing it. . .

I now feel I can get to balls I hadn't been getting to the last few years.[25]

It would be instructive to learn exactly what a ballplayer typically experiences in a hypnosis session with Misel. Correspondent Susan Fornoff of *USA Today* investigated this, and uncovered some good details. We note Fornoff's report:

Harvey Misel flips a switch on his sophisticated sound system and a strobe light starts flickering on the ceiling above his head.

"Relax, relax," he intones into a microphone, in his deep raspy voice. "Let yourself go down into a deep, calm, relaxed restful sleep. Every muscle in your body relaxes. Most of all the mind relaxes."

Two fluorescent lights give the darkened office an eerie glow. Misel slowly counts backward from 10, the sound system echoing every numeral. Beethoven's *Moonlight Sonata* begins to play.

And Harvey Misel has hypnotized another baseball player... Listen to Misel talking to the hypnotized player: ". . . See the ball... You coil, have your bat in a launch position and you see the ball three or four times its normal size. You see it so good, so clear. You hit aggressively, you are so strong, so confident, so competent and so able. Every time you step to home plate, a feeling of confidence surrounds your mind and your body and you know you're going to hit the ball hard. . ."[26]

In the Introduction we observed that the hypnotic state of mind occurs when three factors are present: 1) superconcentration of the mind, 2) relaxation of the body, and 3) increased susceptibility to suggestion. Misel's induction technique brings about these three factors. For example, the dark room and flickering strobe light focuses the person's attention (helping to create a superconcentration of the mind effect). Dr. Conn did something similar with Paul Blair; according to Marty Bell, Dr. Conn had Blair "concentrate on a light in the corner of his room," a light which "flickered faster and faster capturing Blair's attention." We can also single out Misel's use of pleasant music and soothing instructions to the person to relax as keys to producing the relaxation of the body factor usually required for one to attain the hypnotic state.

Misel's hypnosis induction technique is one you can easily duplicate on your own. You can make a cassette tape, with you telling yourself to relax; the relaxation part of your tape can last 5-10 minutes, or any length of time you desire. Then, after the relaxation part, you can tape whatever instructions, suggestions, and visual imagery you feel you need to help you in your sport. This section of the tape can last several minutes should you wish, and you erase it and retape over it as your needs change. Be sure at the end of the tape to "awaken" yourself, telling yourself to return to your normal wakeful condition.

Before playing the tape, you can dim or turn off the lights in your room. Then, lying on your bed or couch, you can stare at some point on the ceiling. If you have another source of sound, you can have it playing soft music. With all these elements in place, you have essentially duplicated what Misel's clients experience.

If you want to obtain hypnosis tapes specifically geared for baseball players, rather than make your own, there are some currently available. Bruce Bain, former Redmond High baseball coach (in Redmond, Washington), and Dr. Gary Gawain, a clinical psychologist, have produced and market baseball hypnosis tapes. While playing for the Dodgers, relief pitcher Tom Niedenfuer was given some of these by Bain, who happened to be Niedenfuer's coach in high school. The reliever used the tapes at the beginning of the '83 season, and found them beneficial, stating:

I used the pitching tape about two or three times a week to relax and get my confidence and visualize myself on the mound. It has worked fairly well.[27]

The tapes put out by Bain and Dr. Gawain, which I have obtained and listened to, follow the

usual pattern found in most hypnosis tapes: the player first is brought to a state of relaxation; then, he is presented suggestions and ways to visualize himself dealing with certain baseball situations. Says Niedenfuer:

(The tape) starts out and you get into a relaxed position. Then it talks to you and helps you to relax, visualize yourself... I just sit there and visualize myself on the mound in a tight situation—that specifically goes to relief for me—coming in and putting out a big rally, not trying to overthrow the ball, and not trying to strike people out, but more or less throwing to where I am trying.[28]

Each “Baseball Mental Conditioning Tape,” as Bain and Dr. Gawain call it, covers a different skill in baseball. Niedenfuer, for example, gave teammate Steve Sax a tape on fielding. Another one on hitting is available. Also, the tapes, which run about 15 minutes, are general in nature, not tailored to the individual (unlike a tape you make for yourself).[29]

Customized baseball hypnosis tapes have been made for professional ballplayers by Bill Little, a St. Louis psychotherapist. Correspondent Jonathan Goodman of the *L. A. Times* relates that Little “prepares tapes for ballplayers at no charge,” and he has worked with such pros as Ozzie Smith, Darrell Porter, Terry Kennedy, and George Frazier.[30] Little adopts the same format for his tapes that I suggested you follow in making your own. Reports Goodman:

Little said his tapes suggest a specific way to relax, after which he describes procedures for whatever it is the player wants to improve or visualize—the windup, pitching from the stretch position, swinging the bat, whatever. He obtains information on the desired techniques in an interview with the player.

“Primarily,” he said, “I use progressive relaxation and breathing exercises, with some visualization about relaxation and some hypnotic suggestions at times, if the guys want that... Following the relaxation, I start describing the exact thing that they want to see.”

In the case of a pitcher, Little says that his tape would include something like the following:

I would say, . . . “With your eyes still closed and still in this relaxed state, visualize yourself standing on the mound, looking in to get the sign from the catcher. You see the sign and it’s for a slider. You see yourself going into the windup. You see your knee come up to exactly the height you want it, and at that point you see the right arm going back. Your motion starts forward. Your shoulders are perpendicular to the plate at the beginning and now they are square around as you throw. You follow the flight of the ball all the way to the catcher’s mitt. You see the pitch going exactly where you want it to go . . .”

In 1983 Seattle Mariners pitcher Matt Young used hypnosis tapes made by Little, listening to them four or five times a week. Young posted a respectable 3.34 ERA that year, and commented that the tapes “really helped me get going.”

A few general remarks about hypnosis tapes are in order. Hypnosis tapes can be helpful to the athlete. But, they do have some weaknesses. The main weakness is that they say the same message every time. The message may benefit the athlete at first, but as the athlete’s needs change, so must the tape’s message change. Unless the athlete purchases a new tape which addresses his new needs, or records a new message on the old tape, the original tape loses its effectiveness. So, hypnosis tapes are deficient in the areas of flexibility and adaptability. They also to a degree lack impact. It is hard to develop rapport with things, such as a tape, whereas it is much easier to experience rapport with people, such as a hypnotist or oneself; and, with rapport comes impact. Despite the weaknesses inherent in hypnosis tapes, it is far better for the athlete to use a hypnosis tape than to practice no mental rehearsal technique at all.

Third baseman George Brett of the Kansas City Royals had occasion to use a mental rehearsal technique. He tried a simple visualization drill while waiting for a wrist injury to heal. Towards the end of the 1980 season, Brett, who nearly batted .400 that year, missed eight games because of tendinitis in his wrist; mentally, though, he was not "idle" during his layoff. Relates Brett, "When I was out, I'd sit on the bench and visualize myself at the plate. I'd ask myself what I would do on a given pitch. I must have batted 600 times in my mind. . . ."^[31] In the first three games after Brett returned to the line-up, he went 6 for 12, a clear indication that his physical conditioning and mental preparation had been attended to. "I didn't feel like I had even been away," he stated. We do not know if Brett, the two-time American League batting champion, continued the visualization drill through the remainder of the season, but he did place the mental technique in its proper place by remarking, "Let me tell you, it's easier to get hits in your head than it is on the field." This remark highlights the fact that adopting visualization, self-hypnosis, or other mental training strategies does not automatically bring about athletic success; much hard work is required for you to achieve this, especially because your opponent will not cooperate. This means you must work on your mental preparation, physical conditioning, and technical proficiency; by neglecting any of these three components of athletics, you will perform poorly sooner or later, and become vulnerable to defeat.

One of baseball's top hitters, third baseman Wade Boggs of the Boston Red Sox, continues to delight fans and frustrate opposing pitchers with his sensational performance. So far in eight seasons Boggs has five times won the American League batting championship (in 1983, and 1985 thru 1988). This success is partly the result of his unique mental preparation regimen, which contains elements of self-hypnosis. When he steps into the batter's box, the first thing Boggs does is draw the Hebrew *chai* (life) sign with his cleats. He also does wind sprints before night games at 7:17 (the 7:17, informs Boggs, stands for going 7 for 7), as well as eats chicken before each game—always. All these rituals greatly benefit Boggs: they help him sharply focus his attention on the pitch and the game itself, tune out distractions, and instill in him a positive attitude. Says Boggs, "It (rituals) helps me concentrate."^[32] That it has. Boggs has averaged .353 since coming up to Boston, and in 1985 batted .368 while getting 240 hits (the most in the majors in 55 years). During the '86 season NBC commentators Tony Kubek and Joe Garagiola told viewers that the Red Sox third baseman also practices visualization, imagining the night before a game: 1) the kind of pitches the opposing pitcher will likely throw, and 2) himself making the "perfect swing." The following year Boggs briefly discussed this aspect of his mental preparation, stating: "You sort of relate to the pitcher; maybe it's mental telepathy. I try to see into the future. When I face somebody, I look for a pitch that maybe I've seen from the guy before. Then when I do get it, and swing the bat, it's sort of like *deja vu*."^[33] Such rehearsal is wise on Boggs' part, because regularly employing multiple mental training strategies—visualization and self-hypnosis type rituals—provides him extra insurance. In case one of the techniques proves inapplicable for the competitive situation encountered, or is poorly practiced, thereby being rendered ineffective, still a backup mental aid is in place, which will help Boggs perform up to his potential.

We have so far seen numerous examples of professional baseball players using hypnosis or visualization to improve their performance. Obviously, there is no reason why ballplayers at the amateur level cannot derive from mental training similar benefits. In fact, many positive experiences with hypnosis, visualization, and the like have occurred with such players. I will limit myself to presenting two examples of these incidents so as not to belabor the point.

My brother, Lt. Col. Michael Stevenson of the Air Force, is a big skeptic when it comes to such things as hypnosis and meditation. In 1979 he served as player-manager of the Gunter Air Force Station Reds, a team in the Central Alabama Amateur Baseball League. The quality of baseball in this league is pretty decent, equaling that of semi-pro ball; in fact, several major leaguers, such as Oscar Gamble, have come out of this league. In any case, my brother didn't hit

too well in the early stages of the '79 season, and decided to give self-hypnosis a try after all. He gave himself the suggestions to "step toward the pitcher," "watch the ball," and "make contact." Brother Mike reports that these suggestions definitely worked. He significantly picked up his average, and cut way down on his striking out.

Miami Herald sports writer Bill Van Smith related in 1978 the fantastic success a Miami area high school baseball team enjoyed while using hypnosis. The team was Coral Park High, coached by Steve Hertz, who played briefly for the old Houston Colt 45s in 1964. Hertz, according to Van Smith, "uses hypnosis extensively in his coaching."^[34] Apparently, Hertz would hypnotize his players and guide them through the hypnosis session, because Van Smith informs us that "the hypnotic suggestion he practices on his team is not an 'overnight' thing." Forthcoming comments by Hertz reinforce this assumption that the sessions were initiated and run by the coach. We do not learn if the hypnosis sessions were voluntary or "voluntary" (meaning, if you didn't take part, the coach and other players might regard you as "not part of the team"). No matter how much free will was involved, the players seemed to prosper from the hypnosis. In 1976 Coral Park went 16-7; in 1977 they posted a 28-5 record; and, at the time of Van Smith's report the team was 22-1, which was the best record in Florida. Said Hertz, "I think we've been more successful since we've started this mental approach to the game."

Coach Hertz's discussion of hypnosis and how it fits into his baseball program contains some salient points:

We want our players to picture themselves in a game succeeding. We want them picturing themselves ripping a pitch for a base hit before they do it. . . .

We try to get it (the hypnosis) across to the kids as trying to accept positive suggestions... It's something you have to practice. It has to become a part of your personality.

It's not like picking up and reading a book on positive thinking and all of a sudden having a change take place. It takes time. Partially, what I'm talking about is relaxing and letting your subconscious—which you have programmed—take over.

You can't take a mediocre player and turn him into a super one. But, what it can do is help a player achieve his potential. It builds up his confidence in himself.

Again, we see the theme that hypnosis needs to be **practiced**; as Coach Hertz contends, experiencing significant improvement in performance after incorporating hypnosis into one's mental training regimen "takes time." Also emphasized is the familiar theme that hypnosis cannot create superstars out of mediocre talent, something Dr. Tracy discovered while working with the St. Louis Browns; but, hypnosis does "help a player achieve his potential." Really, there is nothing new in Coach Hertz's commentary and real-life experience with hypnosis. What he did, though, is something not enough athletes and coaches do: he actually tapped into useful, "exotic" knowledge that has been around for years. He created a mental training program—with hypnosis as the cornerstone—for his team. Assuming the players were not coerced or subtly pressured into taking part in the hypnosis sessions, one would have to judge Hertz's actions a resounding success.

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More than ever before, professional baseball players are employing hypnosis, visualization, meditation and other mental training strategies. Furthermore, reports of players using mental rehearsal techniques multiply faster than I can verify. All of this is indicative that the sport continues to evolve, becoming more like the "Science of Baseball" than the "Grand Old Game." This welcome trend seems to be producing an overall higher level of play, something which, by giving various mental training strategies a try, you too can enjoy.

FOOTNOTES

1. "Hypnosis Out of the Closet, Into the Clinic," *Los Angeles Times*, January 1, 1978, Part IV, pp. 6-7.
2. "Foster's Career Saved by Hypnotist," *Los Angeles Times*, April 1, 1977, Part III, p. 13.
3. Marty Bell, "Hypnosis in Sports: How to Slip Into a Trance and Out of a Slump," *Sport*, March, 1974, pp. 93-97.
4. "Ginger and Burt Hooten," *Los Angeles Times Home* magazine, November 25, 1979, pp. 69-71.
5. "A Second Effort," *Los Angeles Times*, September 23, 1975, Part III, p. 1.
6. Pete Thomas, "Thinking Positive," *Los Angeles Times*, July 26, 1986, Part III, p. 16.
7. *Ibid.*
8. "The Angels Try Hypnosis—and It Works, 5-4," *Los Angeles Times*, July 17, 1977, Part III, p. 1.
9. David Kahn, "Hypnotist Helps Get Buckner Back on Track," *Los Angeles Times*, August 30, 1982, Part III, p. 3.
10. *Ibid.*
11. "Self-Hypnosis Helps Jones Spur Padres," *The Sporting News*, July 12, 1982.
12. Steve Rudman, "Mind Games," *Bill Mazeroski's Baseball '86* magazine.
13. *Ibid.*
14. Ross Newhan, "Carew Hot, but Countdown to 3000 Is on Back Burner," *Los Angeles Times*, May 4, 1984, Part III, p. 1.
15. Rick Reilly and Ross Newhan, "Is Hypnosis Turning Mike Witt Into a Winner?" *Los Angeles Times*, May 2, 1984, Part III, p. 7.
16. Newhan, p. 11.
17. Reilly and Newhan, *op. cit.*
18. *Ibid.*
19. "Paciorek, Hypnotist Team Up," *Los Angeles Times*, October 6, 1983, Part III, pp. 8-9.
20. White Sox co-owner Jerry Reinsdorf was unsure how much credit Misel deserved for his team's good showing, saying, "It (the hypnosis) very well might be just a placebo effect" (see "Hypnotist Harvey Misel Casts a Spell on the White Sox," *People Weekly*, September 26, 1983, pp. 50-51; this article also contains an interesting photo of Misel hypnotizing Paciorek).
21. Susan Fornoff, "Hypnosis Moves Onto the Diamond," *USA Today*, June 30, 1983, Section C, pp. 1-2.
22. Thomas, *op. cit.*
23. John Strege, "Sax Will Consider Hypnosis If Throwing Problems Persist," *Orange County Register*, May 1, 1984, Part D, p. 1.
24. "Hypnosis Gets Bowa Closer to 2,000," *The Sporting News*, May 16, 1983, p. 16.
25. *Ibid.*
26. Fornoff, *op. cit.*
27. Jonathan Goodman, "Athletes Game for Relaxation Tapes," *Los Angeles Times*, November 24, 1983, Part III-A, p. 1.
28. *Ibid.*
29. For additional information on these tapes contact: Sports Psychology Clinic, 10126 N. E. 132nd St., Kirkland, WA 98034.
30. Goodman, *op. cit.*
31. Dan Hafner, "Another 2-Hit Game Puts Brett At .400," *Los Angeles Times*, September 20, 1980, Part III, p. 5.
32. Sam McManis, "Red Sox's Boggs Might Be Best Kept Secret in Baseball," *Los Angeles Times*, July 17, 1983, Part III, p. 3.
33. "A Higher Level," *Los Angeles Times*, June 27, 1987, Part III, p. 6.
34. Bill Van Smith, "Hypnosis in Baseball: It Works at Coral Park," *Miami Herald*, April 18, 1978.

MENTAL TRAINING STRATEGIES TIME LINE
(PROFESSIONAL ATHLETES)

S O E F A S O N	<p>Yoga Sessions (Bob Stafford)</p>	<p>Personality Tests and Assessment (Used by management of Cleveland Cavaliers, Minnesota North Stars, Los Angeles Clippers)</p>
	<p>Hypnosis Sessions (Billy Casper; Tony Lema)</p>	<p>Sports Psychologist Works with the Team (Dr. Gerson conducted hypnosis sessions; Saul Miller used a variety of techniques; Dr. Ogilvie)</p>
	<p>Yoga Sessions (Jim Chones; Kareem Abdul-Jabbar)</p>	<p>Visualization Sessions (See Barbara Kolonay's work with the Phoenix Suns; Bill Russell used his "mental camera" while riding the team bus; Frank Zane)</p>
	<p>Pre-tournament Meditation (Jane Blalock)</p>	<p>Pre-game Self-hypnosis Session (Bob Stafford; Darrell Griffith; Jay Robinson; Al Thompson)</p>
	<p>Deep Breathing for Relaxation and Concentration Purposes (Bob Pettit)</p>	<p>"Instant Replay" (Bill Russell graded himself after each game, replaying the contest in his mind through visualization)</p>
T H E S E A S O N	<p>Use of Visualization <u>while</u> Playing (Jack Nicklaus; Tom Watson; Ben Hogan also practiced visualization in his hotel room)</p>	
B E F O R E T H E N		
C O M T P H E T I T I O N		

PROFESSIONAL ATHLETES: HOW SELF-HYPNOSIS, IMAGERY, AND OTHER MENTAL TECHNIQUES HELP

The pressures to perform well are felt the most by professional athletes. This is because the professional athlete makes his living from his sport and, therefore, must produce. Should he do otherwise, he will no longer make it in the pros; management releases him or his winnings tail off. If that situation arises, the athlete knows full well he has no alternative but to find another occupation. Perhaps it is this concern that has led so many professional athletes to obtain a competitive edge available from hypnosis, imagery, and other mental disciplines. There are surely those too who practice these techniques for reasons similar to those of the amateur athletes: 1) the techniques bring on a general feeling of well-being, and 2) the techniques help the athlete perform up to his potential. Such results are satisfying regardless of the money at stake. Whatever the case, there are professional athletes in virtually every sport who are avid practitioners of one or more mental training strategies.

I once arrived early for a professional volleyball game, and met Bob Stafford, a self-hypnosis and yoga practitioner. At the time he was a starting front row player for the Orange County Stars of the International Volleyball Association. This was in July, 1977, the year Stafford helped lead his team to the league championship. He had an excellent story to tell. It was particularly interesting to learn that the college he attended had, and perhaps still does have, an active self-hypnosis group—the San Diego State University Self-hypnosis Society. This organization can be said to have done a tremendous job helping students master their coursework. It did for Bob Stafford, as he pointed out:

There was a course on self-hypnosis at San Diego State University sponsored by the San Diego State Self-hypnosis Society. I got involved with it. It wasn't so much for sports; it was more just training your mind for academic and all-around life. I took the course for about a year, and used self-hypnosis mostly for studying for my classes. I wanted to just study for a short time and get everything wired, instead of going over everything all the time. I ended up getting B's, without pushing.

As for my volleyball, there are ways of getting ready for games. I practice yoga during the off-season. During volleyball season I won't do the mental part of yoga, but just the stretching out. I take yoga classes, though, during the off-season; because that's really an important part of volleyball—being relaxed and loose.

There's another thing I do. It's sort of self-hypnosis or meditation. I clear my mind before a game, chase away all the cluttered thoughts in my brain. Then I concentrate on what I want to do in the volleyball game. In a way I'm giving myself hypnotic suggestions, because I'm going over what I want to do. I get myself in a state of mind where I'm concentrating. Then I go over what I want to do in a certain situation. So, it's like a suggestion, although I don't do it in a real formal way.

As Stafford related these experiences, many questions came to mind. I wanted first of all to know more about the self-hypnosis procedure Stafford employed for his studies. He explained that everyone belonging to the San Diego State Self-hypnosis Society was given a little card which contained a series of instructions to be followed. Continued Stafford, "We were to go through the sequence every time, so it would build up into a real concentration type of situation. I always had my books in the same place and stuff like that. Then, in the end I would tell myself what my goals

were for that study period." I wondered if Stafford gave himself specific hypnotic suggestions, such as "I will remember everything I study." Not quite that, he replied: "I would just get myself to where my study and test attitude would be the same. There was also a sequence; like if I had a hard time with one question, I'd do this technique of getting everything out of my mind, and then concentrate on a star. With that, hopefully, the right answer would come into my mind. Usually it did."

Stafford used self-hypnosis during the whole time he attended San Diego State; it wasn't just a one-shot deal. Through constant use of the technique, he only required a few seconds to enter the hypnotic state, as is generally the case with regular practitioners of self-hypnosis. Responding to the question, "How do you know when you're in the hypnotic state?" Stafford answered that, after first completely relaxing his entire body when initiating self-hypnosis, he'd then experience "this kind of tingling sensation," which signalled to him that he was under. Now, however, Stafford doesn't go through a complete body relaxation procedure when he uses self-hypnosis. "It's more just pure mental thought," he says.

Regular practitioners of self-hypnosis tend to dispense with the step of completely relaxing the body. This is not because such practitioners are lazy, but rather because, thanks to their proficiency, they are able to attain the hypnotic state with "pure mental thought" alone. As a long-time practitioner of self-hypnosis myself, I can go in and out of the hypnotic state as fast as I want, without having to relax or lie down. For me it's as simple as focusing my thoughts on but one thing—what I'm telling myself in my mind to do. This is admittedly a quick way to perform self-hypnosis, but it works for adepts.

While Bob Stafford was still an amateur, he had a coach, Dick Montgomery, who once hypnotized all the players on his team. This occurred in 1976 during the United States Volleyball Association nationals in Schenectady, New York. According to Stafford, "Montgomery did it mostly to relax us, and he talked for a long time. He gave some suggestions, but I can't recall them." Coach Montgomery hypnotized the team before the finals. Naturally, I wondered how Stafford and his teammates played in this important game. "I did good," Bob replied, "but a lot of guys that hadn't done any hypnosis before, just all they did was get tired and sleepy. It was hard for them to regain their consciousness. They were still under it almost. Because they were really slow, still kind of in a daze."

Because I did not have the occasion to interview Coach Montgomery, let us treat Stafford's story as a hypothetical case. Hypothetically, we will assume that what Stafford reports is true. This being the case, we must question the actions of Coach Montgomery. If you are going to be heavy-handed and hypnotize the team you coach, you at least should be proficient in the administration of hypnosis. But, Montgomery's hypnosis job came out very sloppy, according to Stafford's testimony, since many of the players were "still kind of in a daze" and "were really slow" during the game. No doubt Coach Montgomery's intentions were good, but good intentions alone do not make one an effective hypnotist. Perhaps this realization hit Montgomery during the game, as he could not help but see many of his players float around the floor. As for those players still in a daze, it is unlikely any of them were sold on hypnosis after this experience—which is too bad, because hypnosis can help you out in so many ways. Why Montgomery could not restore these players to normal consciousness is hard to understand; for it is really easier to do this—to "awaken" a person—than it is to hypnotize one. We can only conclude that Stafford's recollection of the incident is perhaps inaccurate (since Coach Montgomery's version of what happened might contradict Stafford's testimony), or that Coach Montgomery was, in fact, either sloppy or did not know what he was doing. Obviously, a coach who wants to use hypnosis on his players would be wise to: 1) know what he is doing, 2) do a thorough job of hypnotizing and dehypnotizing his players, and 3) not wait until just before an important game to spring hypnosis on the players (in case the hypnosis session backfires).

According to Bob Stafford, a lot of professional volleyball players like to meditate. “Meditation is more prevalent” than self-hypnosis, he noted. In fact, professional volleyball players on another team, the Seattle Smashers, investigated mental techniques at one time. James G. Bennett, co-author of *The Miracle of Sports Psychology* (1982), says that he “served as Mental Dynamics consultant to the Seattle Smashers Professional Volleyball team.” The Mental Dynamics refers to a series of mental rehearsal techniques, relaxation exercises, goal-setting recommendations, etc. which Bennett presents throughout his book, these serving to help the athlete achieve his potential. How many of these techniques and exercises Bennett got the Smashers to use he does not say; nor does he say what year(s) he worked with the players or how the Smashers responded to his assistance, except to say that “the players were sometimes unsure of what to call him or how to refer to him.”

A more detailed report exists about a professional soccer team working with a psychologist. The Fort Lauderdale Strikers of the North American Soccer League ran into a cold streak during the 1979 season. Andy Furman, the Strikers’ Public Relations Director, called upon Dr. Richard Gerson of Hollywood, Florida to help the team. Dr. Gerson seemed uniquely qualified for the assignment; not only was he a psychologist, but he also was a former college basketball star. Gerson met with all the Strikers and concluded that “the players were victims of stress. They were a team of stars who weren’t winning and the players became too anxious.”[1] Supposedly, a lot of negativism was being generated by the fans, media, and team owners, and the players allowed the negativism to affect them. Dr. Gerson told the athletes, “Fear of failure and losing will produce exactly that, in life and on the field.”[2]

What the psychologist did to combat the Strikers’ fear of failure was to work on an individual and private basis with several of the players, employing hypnosis. As reported in the *Bulletin* of the Association to Advance Ethical Hypnosis, Dr. Gerson “suggested they concentrate on what they do well, switch their mindset from negative to positive.”[3] The Strikers seemed to respond to the psychologist’s efforts because they began winning again, and finished in 2nd place in the Eastern Division of the American Conference. The following year, 1980, the team made it all the way to the league championship, losing to the New York Cosmos.

Many sports psychologists are of the belief that teams should not call in hypnotists, sports psychologists, and similar “mental coach” types only when a problem arises; sports psychologists, they assert, are not like doctors or firemen, who one generally contacts only if absolutely necessary. Rather, the expertise of the sports psychologist should be tapped in good times as well as in bad. Basically, I support this position. I would also contend that if a sports psychologist can help turn things around for a team or individual athlete when things look bleak, as Dr. Gerson apparently did with the Strikers, then he will probably be doubly effective for the team or individual when everything is going smoothly. Sports psychologists and team hypnotists always appear to be subjected to a trial by fire, asked to correct severe problems (not of their own making, of course); and, if they fail, they and/or the mental training strategies employed are often censured. This is quite an unfair and undeserved indictment. A better test of a sports psychologist’s effectiveness would be to let him work with athletes who are not experiencing some crisis, but instead simply desire to improve their performance. We will look at some examples of this later on in the chapter. For now it is instructive to keep in mind all the times when sports psychologists have helped transform a losing team or athlete into a winner—a feat neither the coach nor the athlete seemed able to accomplish.

We have emphasized in the Introduction that self-hypnosis and meditation are closely related, both producing similar physiological effects. The same can also be said of yoga, a discipline whose practice brings on, among other things, peace of mind and assorted health improvements. The fact that yoga and self-hypnosis are similar is important to understand because many professional and Olympic athletes practice yoga, and you may wish to follow their lead. Dr. William

Kroger, in his *Clinical and Experimental Hypnosis*, elucidates on this similarity; he notes the comments of H. Gastaut who, “after studying the EEG patterns of Yoga and Zen disciples, concluded that the observed alterations in awareness were autohypnotic states.”[4] Dr. Kroger himself considers yoga and self-hypnosis but variations of the same theme. He draws many parallels between the two disciplines. For example, “the goal of ultimate reality or nirvana—the state of complete liberation—is strikingly similar to depersonalization and to other dissociated states characteristic of hypnosis.”

Yoga is not a religion. Rather, it is used, mainly in India *in conjunction* with religion, to facilitate the quest for union with God. As Dr. Kroger points out, “Yoga is not considered a religion, but rather a ‘science’ to achieve the mastery of the mind and cure physical and emotional sickness.”

There are many forms of yoga, perhaps the most popular with athletes being hatha-yoga. Hatha-yoga teaches various breathing techniques and body postures, with better health as the main goal. An athlete who says he practices yoga most likely means hatha-yoga, because of its outstanding job in stretching muscles and enhancing body flexibility; of course, staying limber is important for any athlete because tight muscles and inflexibility invite injury.

Jim Chones, former Cleveland Cavaliers center and Los Angeles Lakers forward, regularly practiced yoga during his professional basketball career. He credited yoga for helping to make him a leading “ironman” of the National Basketball Association. Related Chones in 1979, “For the last 4 1/2 years I’ve been doing yoga, about 20 minutes a day, and I’ve never had a muscle pull.”[5] Later that year staff writer Scott Ostler of the *L. A. Times* reported in greater detail on Chones’ use of yoga:

Chones became interested in Eastern philosophy in college. Four years ago he incorporated yoga into his daily routine, and he reads constantly, especially books like “Metaphysical Meditations.”

“I just love those kind of books,” he said. “I can’t get enough of them. Let me show you what I’m reading now. I read this every morning. ‘Dear Father, whatever conditions confront me, I know that they represent the next step in my unfoldment. I will welcome all tests because I know that within me is the intelligence to understand and the power to overcome.’”[6]

The phrase Chones read to himself every morning would qualify as a good general auto-suggestion. This is yet another indication that any differences separating yoga practitioners from self-hypnosis practitioners are minor. Interestingly, Ostler made it clear that Chones was but “one of several on the Lakers” who practiced yoga. The other players on the team who engaged in the discipline went unidentified at the time; but, several years later it was revealed that Lakers center Kareem Abdul-Jabbar attended yoga classes. Abdul-Jabbar, the all-time NBA scoring champion and record holder for most seasons played in the league, termed the yoga classes as “crucial” in extending and enhancing his exemplary career. Referring to cardiovascular training, strength training, and yoga, he remarked, “I don’t think I’d (still) be playing (in 1987) if it wasn’t for that.”[7]

The 1979-80 season, in which yoga practitioners Abdul-Jabbar and Chones both played for Los Angeles, definitely qualified as one where the Lakers physically and mentally put it all together: they won the NBA Championship. Coincidence? Maybe, because the next year the Lakers lost to their first opponent in the playoffs, the Houston Rockets. Even so, the weight of evidence tends to support these conclusions about yoga: 1) the discipline offers the athlete many of the same benefits that self-hypnosis and meditation provide, and 2) like self-hypnosis and other mental training strategies, practicing yoga does not guarantee you victory.

The Phoenix Suns found out in 1982 that employing mental rehearsal techniques will not ensure victory. Sports psychologist Barbara Kolonay worked with the Suns during the 1981-82 season. The main mental drill she had the players perform was imagery. The players, with eyes closed, lied down on mats on the basketball gym floor. According to correspondent Rebecca Bricker of *People Weekly*, Dr. Kolonay would then set up a critical game situation for the players to imagine, such as this one:

The score is tied with only five seconds to play. The whistle blows: You've been fouled. You can feel your heart pounding. Your legs are rubbery. Sweat is rolling down your back. A hush settles over the crowd. The referee hands you the ball for the free throw that could win the game.[8]

While the players imagined themselves in such a situation, Kolonay noted the psychological reaction of each player via a biofeedback instrument. Reported Bricker:

(Kolonay) gives each player a hand-held biofeedback instrument which indicates tension by measuring the expansion of skin pores and the amount of sweat. From the rapid high-pitched tone the device emits, Kolonay can gauge anxiety levels and concentrate on imagery.

Presumably, Dr. Kolonay provided anxious players some tension-reducing and confidence-building imagery to help them deal with potential game-on-the-line situations. In fact, Kolonay's imagery technique was credited with improving forward Truck Robinson's free throw shooting percentage from 59% to 75%. We do not learn from Bricker how other members of the Suns did on improving their free throw shooting or overall performance, but we do find out that Kolonay's specialty is helping basketball players improve their free throw shooting. Dr. Kolonay's master's thesis, informs Bricker, "showed that the success rate of eight New York area college basketball foul shooters had significantly improved—from 68.3 percent to 74.8 percent—after a six-week program of relaxation and imagery exercises." [9]

While the imagery exercises might have helped the Suns improve their free throw shooting percentage, it was not enough to get them by the Los Angeles Lakers in 1982. Phoenix finished in third place in the Pacific Division, 11 games behind the first place Lakers. Then, in the second round of the playoffs, Los Angeles swept the Suns in four straight. Because Phoenix employed the services of a sports psychologist during the season, let us focus in on these four games, comparing the Suns' free throw and field goal percentages to those of the Lakers. (The overall percentage totals in this case were obtained by assigning an equal value to each game, adding the four games' percentages, then dividing by four.)

	Game 1		Game 2		Game 3		Game 4		Overall	
	FT	FG	FT	FG	FT	FG	FT	FG	FT	FG
Suns	70.4	40.4	80.7	43.6	68.8	52.7	70.7	40.4	72.6	44.3
Lakers	68.0	57.0	64.5	53.4	81.3	53.1	68.0	57.0	70.5	55.1

FT = Free throw percentage

FG = Field Goal percentage

The Suns only shot 2% better than the Lakers on free throws, an insignificant difference. The Lakers, however, outperformed Phoenix on field goals by an impressive 11%. If one were to guess which team used the services of a sports psychologist, the Lakers would be the logical choice. But, Dr. Kolonay worked with the Suns, not the Lakers; and, her specialty was helping

players improve their free throw shooting via imagery. So, how do we account for the Lakers essentially matching the Suns on free throws and way outperforming Phoenix on field goals? For starters, the Lakers were a strong team in 1982, winning the NBA Championship. Not only were the Lakers strong, but Kolonay might assert that the players on the Lakers were highly compatible. Bricker tells us that Kolonay's doctoral dissertation revealed that "compatibility meant victory. Among teams with a .500 record or better, those whose players got along best won the most games, those whose players got along next best had the second best record, etc." So, the players on the Lakers may have been more compatible with each other than was the case with the players on the Suns; and, this compatibility factor perhaps figured more prominently in the final equation than any benefits Kolonay's imagery provided the Suns.

Probably the best explanation for the Lakers superior performance was that L.A. just possessed more talent than Phoenix; after all, the Lakers did have superstars Kareem Abdul-Jabbar and Magic Johnson. Johnson himself implied in his book, *Magic* (1983), that the Lakers were more talented, stating that the Suns "were unable to match our speed and quickness."

Of course, all of these proposed explanations are speculative in nature. The '82 season cannot be replayed. So, we'll never know how the Suns would have done if Dr. Kolonay had not worked with them. Perhaps Phoenix would not have even made it to the playoffs without Dr. Kolonay's help; then again, maybe the Suns would have done much better without the imagery sessions. All we can do is speculate.

Dr. Kolonay charged the Suns \$50/hour for her imagery sessions, and at the time of her work with Phoenix was looking into helping out the Chicago White Sox or New York Yankees. As we have already seen, Harvey Misel won the contract with the White Sox; this occurred in mid-1983, showing that the White Sox management was thinking about hiring a "mental coach" for over a year before actually doing so.

Dr. Kolonay is not alone in having introduced mental training techniques to a professional basketball team. In 1985, as reported in the *Orange County Register*, the Los Angeles Clippers retained the services of a sports psychologist, Saul Miller. Miller defined his role in working with the team as that of a mental coach, one who complements the rest of the coaching staff; he emphasized at the time that he should not be regarded as a doctor, that is, as someone who is called in because there is a problem. The sports psychologist briefly described the complementary nature of his serving as the Clippers' mental coach:

Teams have strength coaches to work on weightlifting. And I have techniques to improve their mental strengths. It's an instructional thing.

Instead of asking "What's wrong?" our approach is always in a positive context. We ask, "What can I create?" "What can I do?"[10]

The techniques Miller employs to improve a player's mental strength include imagery, breathing exercises, positive-attitude reinforcement, and others which probably are versions of hypnosis. *Register* correspondent Michele Himmelberg, who interviewed Miller, noted that he "offers instruction in the areas of concentration; being loose in a game, yet still being intense; and stress, which can rise to high levels with cross-continental travel."

At the beginning of the 1985-86 season the sports psychologist's work seemed to have paid off with the Clippers. Los Angeles won its first five games, the best start in the franchise's history. Then, a rash of serious injuries hit the team, from which it never recovered (they did not make the playoffs). Carl Scheer, Clippers general manager until his dismissal at the end of the '85-'86 season, feels that professional basketball has reached the point where having a mental coach on the staff is practically a necessity. "In the sophisticated level of the game today," Scheer informed Himmelberg, "we need any edge we can get. It's no longer just a physical game, but a physical-

mental game. This is an awareness that those of us in sports are just now gaining.”

The Portland Trail Blazers evidently agreed with Scheer’s assessment that professional basketball is now a physical-mental game because they too for the 1985-86 season hired a team psychologist, Dr. Bruce Ogilvie. Himmelberg reports Dr. Ogilvie as saying:

We’re very interested to see if a player is adaptable, competitive, if he sets high or low goals. How does he feel about putting out over a period of time? Can he adjust to delayed rewards? Can he come in, let’s say, used to being a starter, then average six minutes a game and not have his ego deflated?

No one is lost due to emotional reasons. My primary responsibility is to see to that.[11]

How Dr. Ogilvie saw to it that emotional matters did not upset players on the Trail Blazers we do not learn from Himmelberg, nor how long Ogilvie served as team psychologist for Portland. We do know, however, that Dr. Ogilvie arrived on the scene with Portland some time after 1980. This is because Bud Winter, author of *Relax and Win* (1981), interviewed Jack Ramsay, then Trail Blazers’ head coach, in 1980. Winter asked Ramsay: “Do you know of any coach in professional basketball who gives his players instructions in how to relax?” (By “relax,” Winter meant a mental rehearsal technique akin to self-hypnosis.) Replied the coach, “No, I don’t.” Winter persisted, leading to the following exchange, which appears in *Relax & Win*:

Question: Jack, when your players shoot foul shots, do you give them any special tricks to stay relaxed? For example, having the players shake their hands and wrists, bouncing the ball a few times, taking a deep breath, dropping their shoulders, etc.?

Ramsay: No, we do not use any special gimmicks. What I stress is concentration and visualizing the ball going into the basket.

Question: Does the athlete close his eyes during this visualization?

Ramsay: No, just a mental visualization.

Clearly, if Dr. Ogilvie had been working with the Portland players in 1980, Ramsay would have mentioned the fact, and no doubt would have been able to describe several mental rehearsal techniques the sports psychologist was having some or all of the team members try out. But, from Ramsay’s answers to Winter, it appears that the Trail Blazers were not doing much in the mental training area at the time. By 1985, though, the situation had greatly changed. Despite their remaining several unanswered questions about Dr. Ogilvie’s work with the Trail Blazers[12], it is sufficient to recognize the trend in professional basketball towards utilizing the services of sports psychologists.

According to Himmelberg, some teams consult sports psychologists when they have very important personnel decisions to make. In 1985 the Cleveland Cavaliers drafted Keith Lee on the first round after they received the results of a personality test Lee had taken. Cleveland already knew about Lee’s considerable physical ability and basketball talents, but they wanted to know more about his character. They hired Personality Dynamics Inc. to assess Lee’s personality traits, and were pleased with the findings. Said Cavaliers’ spokesman Harvey Greene, “The tests showed him to be a winner, a person with a great innate desire, a person who listens well. . . with exceptionally high coachability.” George and Gordon Gund, owners of the Cavaliers and Minnesota North Stars of the National Hockey League, also had Personality Dynamics administer the written personality test to all personnel within the Cavaliers and North Stars organization—players, management, and office personnel. One wonders if the owners were just as pleased with their secretaries’ scores as they were with Lee’s.

The Los Angeles Clippers were interested in making Creighton’s Benoit Benjamin their ’85

first round draft pick. However, the Clippers management wanted to be sure of their choice, and asked Saul Miller to sit in on interviews with Benjamin. After the interviews, Miller apparently gave the Clippers the green light to select Benjamin, which they did. Carl Scheer noted that "Miller helped us identify some things. And he thinks we can raise a player's level of performance by developing those traits." Again, the emphasis is on getting the most out of the athlete—potential-actualizing—with the sports psychologist's role being geared toward this, rather than crisis-intervention. Said Miller about his analyzing the traits of Benjamin[13] and the other Clippers:

These are not people who are having trouble. We want to optimize performance. That can be helping a player to overcome pain or perform in a moment when he's on the spot.[14]

Two years later in 1987 the Clippers possessed three first-round draft picks. On the eve of the draft Don Greenberg of the *Orange County Register* reported that the club had "given psychological tests to all the players they are considering selecting."^[15] Elgin Baylor, executive vice president of the Clippers, explained to Greenberg that this was done because "we want to know as much as possible about the kids we could pick." Perhaps underlying this comment of Baylor's was the wish to avoid the woes some NBA teams had experienced with their 1986 top draft choices. Alluding to these woes, Greenberg cited three notorious cases:

Only two days after the Boston Celtics made him the No. 2 overall selection last June, Len Bias died of cocaine intoxication. The Nos. 3 and 6 picks last season, Chris Washburn and William Bedford, wound up backfiring in the faces of the clubs that chose them. Washburn spent nearly two months in a drug rehabilitation center and had a woefully unproductive season for the Golden State Warriors. Bedford had early season knee surgery before being implicated in grand jury testimony probing drug use among the Phoenix Suns.

Jerry Krause, Chicago Bulls vice president, came right to the point in describing concerns held by NBA management. He told Greenberg:

What's happening in the league this year is that teams are spending more time with their potential draft picks, checking out psychological profiles. Nobody wants to have what happened to Boston, Golden State and Phoenix last year.

Whether the administration of psychological tests can screen out potential or actual drug users remains to be seen. Clearly, though, management is justified in its attempts to obtain necessary insights about prospects as well as current team members; for rendering important personnel decisions in a knowledge vacuum makes little sense.

The main function of sports psychologists involved in basketball, of course, is not to help management make personnel decisions (though such input might prove useful), but rather to assist individual players. Darrell Griffith, former star guard for the University of Louisville, benefitted from such individualized attention. During the halftime of one of the 1979 NCAA post-season basketball tournament games (Indiana State vs. Arkansas), Griffith appeared on national TV and talked about his use of self-hypnosis. It was a filmed segment—one of those human interest stories. He and his coach, Denny Crum, discussed how self-hypnosis had allowed Griffith to better tap the terrific potential everyone knew he possessed. Dr. Stanley Frager, the psychologist who taught the Louisville guard self-hypnosis, also appeared on the segment. He mainly presented facts about hypnosis, what exactly it is and what it does.

After the film segment, sports commentator Bryant Gumbel informed viewers that Griffith scored 12 points two nights before against Arkansas, as Louisville lost, 73-62. Griffith, it turned out, shot 5 for 14 from the field—36%, normally not a good performance. It made one curious

about how the Louisville guard mentally prepared for this game. If he used self-hypnosis, then here is another instance where hypnosis proved to be no panacea. When we say that hypnosis is no panacea, we mean that there are certain factors over which hypnosis has no control.

Griffith, for example, may have been double-teamed throughout the game by Arkansas. Obviously, it is hard to score when there are two men defending you all the time. Whatever was the case that night, Griffith led Louisville to the National Championship the following year, and earned the John Wooden Award as the most outstanding college basketball player for 1980. He carried over his excellent play into the pros, being named the NBA's Rookie of the Year in 1981. As for Dr. Frager, it appears that he continued to regularly work with the Louisville basketball squad; for Coach Denny Crum was reported in 1984 as calling Dr. Frager "the concentration coach" for the team.[16]

In the late '60s Jim Barnett of the old San Diego Rockets attended a stage hypnosis show put on by Dr. Michael Dean (the hypnotist who worked with boxer Ken Norton). Barnett ended up on stage, no doubt with others from the audience, hypnotized by Dean. The hypnosis Dean performed on Barnett was merely a demonstration, yet in the following days Barnett noticed a gratifying improvement in his basketball play and attitude. Recalls Barnett: "I never felt like I was under, but when it was finished, I was in a very positive mental state. I felt that I could do much more than I had been doing. For the next three weeks, I averaged about 20 points per game, and during that stretch I scored my career high of 26. I definitely believe that the experience helped me."[17]

Some basketball players have adopted or developed on their own certain mental concentration techniques, not waiting for management to bring in a sports psychologist (or bothering to visit one themselves). Bob Pettit, the St. Louis Hawks forward who was named to the All-NBA team 10 years in a row, employed a simple breathing exercise just before shooting a free throw. In his book, *Bob Pettit* (1966), he states that before each foul shot he took "a deep breath, then slowly let the air out of my lungs," which helped him relax, making him a highly accurate free throw shooter (he is the fourth-leading free throw scorer in NBA history). If you ever saw Pettit play, you know for a fact he did this; his taking a deep breath at the free throw line was quite noticeable.

Bill Walton, who led the Portland Trail Blazers to the NBA Championship in 1977 and was voted the league's Most Valuable Player in 1978, indicated that he coped with the stress professional basketball players experience by using meditation. Said Walton:

I try to do some form of meditation every day. . . The nicest thing about meditation is that it puts your body in harmony with your surroundings. And that can be real helpful, because when you're a professional athlete, your surroundings can get pretty unharmonious.[18]

Bill Russell, who led the Boston Celtics to eleven championships in thirteen years, and was voted the Most Valuable Player in the NBA five times, used throughout his long career a visualization technique which he called his "mental camera." While a senior in high school, Russell went on a tour of the Pacific Northwest as a member of an All-Star team. Sitting in the bus, he played basketball in his mind. In his book, *Second Wind* (1979), Russell describes his visualization technique:

. . . I was sitting there with my eyes closed, watching plays in my head. I was in my own private basketball laboratory, making mental blueprints for myself. It was effortless; the movies I saw in my head seemed to have their own projector, and whenever I closed my eyes it would run. . . With only a little mental discipline I could keep myself focused on plays I had actually seen, and so many of them were new that I never felt bored. If I had a play in my mind but muffed it on the court, I'd go over it repeatedly in my head, searching for details I missed. I'd goofed because I'd overlooked a critical detail in my mind, so I'd go back to check my model.

During the tour Russell's defensive play in particular made huge progress. Noted Russell, "I blocked so many shots after a couple of weeks on the tour that my teammates began referring to them as 'Russell moves.'" This improved play Russell largely attributed to his unique visualization technique, a mental training strategy he was to use the rest of his career:

I was awed by the mental camera I'd discovered... As our tour went farther north into Canada, the roads stretched for hundreds of miles between stops, which sometimes gave me twelve straight hours of mental basketball on the Greyhound. When we got off the bus I couldn't wait to get on the court, and after a game I couldn't wait to get back to the Greyhound so I could review, compare, expand and dream up new material.

While Russell was a pro, he would grade his performance after each game, never giving himself a grade higher than a 65 on a scale of 100. He graded himself by replaying the game in his mind, using his visualization technique. Recalls Russell:

The grading process never took me long. I could do it in less than a minute in front of my locker, in the shower or in the car driving home. Although I usually forgot the score of a game before I'd even left the locker room, the plays themselves would stay in my mind until I made a conscious effort to forget them. I could grade myself by watching the game again in my head, using that mental camera I'd discovered back in high school on my trip to the Northwest.

What Russell did after each game is advocated by John Syer and Christopher Connolly, authors of *Sporting Body Sporting Mind* (1984). They attach a name to Russell's "mental camera" grading process, calling it **instant replay**. In their book Syer and Connolly define instant replay to be "a visualized review of an action you have just performed. It is generally used to imprint a perfect action more deeply in your sensory memory." Athletes who use visualization normally do it before the competition begins, but visualization, as Russell demonstrated, can be done after competition as well. If you ever do something really well during competition, Syer and Connolly suggest you go over that performance in your mind immediately afterwards. By doing so, you hopefully embed into your subconscious those steps which led to your success, allowing you to call them forth on some future occasion.

Doing the instant replay technique makes sense. After a workout, game, or other form of competition, coaches urge athletes to "cool down" by doing stretching exercises, jogging a lap, etc. If a physical cool-down is recommended, a mental cool-down should be equally advisable. In fact, separate time need not be allocated to each. While the athlete is stretching, jogging a lap, etc., he can be going over in his mind his just-completed performance.

Bill Russell, without encouragement from others, performed a mental cool-down after each game; he used "instant replay" to reinforce good plays he had made and correct mistakes he might have produced (and he did this instant replay technique in front of his locker, in the shower, or driving home in his car). Because he was never satisfied with less than perfection, and felt he never played the perfect game, Russell kept using his "mental camera" visualization process during all his playing days. The result the Celtics center obtained was not perfection, but it was unparalleled excellence.

Visualization, as I mentioned, is usually performed just before competition. Larry Mahan, six-time Pro Rodeo All Around Champion, used visualization in this manner while on the circuit, explaining: "I try to picture a ride in my mind before I get on the bull. Then I try to go by the picture."^[19]

An article by Dick Douce on hypnosis for bodybuilders provides further evidence that athletes in virtually every sport can benefit from the use of mental disciplines. The article, appearing in Joe Weider's *Muscle* magazine, contains pictures of two champion professional bodybuilders, Bill

Grant and Roy Callender. The captions for the pictures read: 1) "Bill Grant can use hypnosis as a way to relax and build confidence before a contest," and 2)—"Roy Callender is now keen on using hypnosis as a means of breaking down pre-workout inhibitions." [20] Regrettably, Douce provides no additional details in the article about their utilization of hypnosis. It is likely, however, that many other professional bodybuilders regularly employ hypnosis and related mental training strategies. For example, Arnold Schwarzenegger, the greatest bodybuilder of the 1970s, told Michael Murphy and Rhea White, authors of *The Psychic Side of Sports* (1978), that he used visualization to speed the development of his muscles. "A pump when I see the muscle I want," contended Schwarzenegger, "is worth ten with my mind drifting." Frank Zane, a three-time Mr. Olympia and Mr. Universe, echoes Schwarzenegger's sentiments. In an *Esquire* magazine article, Zane noted that "it works to practice visualization," and went on to describe how he incorporates the technique into his training program:

Take time during the day, preferably when you're relaxing, and visualize your body the way you want it to be. And there are also other times to visualize. After workouts, I experience soreness, so I direct my mind to the area that's sore and I do a whole visualization practice on that particular area. [21]

Jack Heise of self-hypnosis for golfers fame (see Amateur Athletes chapter) also wrote a book on self-hypnosis for bowlers, titled, *How You Can Bowl Better Using Self-Hypnosis*. In the back of this book (the 1976 edition) Heise republishes an article which appeared in *The Cleveland Kegler* (October 23, 1962)—"Thompson Romps to City Match Title." It turns out that Al Thompson, a local pro bowler, had read Heise's book on self-hypnosis for bowlers (first edition). He applied Heise's ideas, and proceeded to win an important Cleveland tournament. Stated Thompson about Heise's book, "I'll tell you one thing, it helped me and it helped me plenty. Self-hypnosis helps me relax. I am no longer tense or nervous. I am at ease and feel peaceful all over." It is not surprising that principles of self-hypnosis brought Thompson success, as they tend to do this in any other activity requiring concentration. (I loaned my copy of Heise's book to a neighbor, Mrs. Faye Acton, an active bowler in league play. She read the book, tried out some of the things in it, and sure enough, her concentration improved, along with her score.)

Jay Robinson used self-hypnosis to win the \$100,000 AMF Grand Prix of Bowling championship. This occurred in December, 1977, and was reported in the *Bulletin* of the Association to Advance Ethical Hypnosis (1978, No. 79). As stated in the *Bulletin*, Robinson "used self-hypnosis prior to the start of the final round in the nationally-televised championship game," in which he upset top-seeded Mark Roth. Said Robinson, "About two hours before bowling, I put myself in a trance to put good thoughts in my mind. It definitely helped me today. I was able to block out everything but my bowling. My concentration was never better. Without using self-hypnosis, I doubt that I would have won." We can assume that Robinson had practiced self-hypnosis on other occasions, given his remark that "it definitely helped me today," and it's easy to imagine that the Grand Prix victory encouraged him to continue using the mental training strategy for his bowling.

Many professional golfers, due to the intense level of concentration their sport demands, have turned to hypnosis and imagery for assistance. Arthur Ellen relates in his book, *The Intimate Casebook of a Hypnotist*, that he hypnotized the late Tony Lema several times. After these sessions with Ellen, Lema started winning more tournaments than ever before. Ellen also states that a substantial number of professional golfers use hypnosis—apparently they have come to Ellen for help—but that he is not free to reveal their identities. Along this vein, Dr. Kroger, in his *Clinical and Experimental Hypnosis*, reports the case history of "a leading professional golfer" to whom he taught self-hypnosis. Dr. Kroger withholds the identity of this golfer, although he does not hesitate to mention that the golfer: 1) "tied the course record in the National Open," 2) "several months later, he won a coveted championship," and 3) "he attributed a good measure of his success to the hypnotic conditioning." One appreciates Dr. Kroger's desire to preserve the confiden-

tiality of the doctor-client relationship. Verification, of course, is not possible. The same situation that applied to the "free pistol champion," described by Naruse in his scientific paper (see Introduction), applies here. Lacking such critical information as the golfer's name, we simply assume, without much enthusiasm, that the story is true, and move on to more tangible reports.

One player who does not mind that the public knows he has used hypnosis is Billy Casper, the two-time U.S. Open champion and five-time winner of the Vardon Trophy (low average score for the year). Correspondent Art Parra of the *Orange County Register* relates the circumstances which led Casper to give hypnosis a try:

In 1975, at age 44, Casper already had won 51 PGA tour events and more than \$1.5 million in purses. Dark days began to set in and during 1980 Casper's winnings flopped to zero, a terrible shock to him and a surprise to his fans.[22]

Casper regarded his 1980 performance as unacceptable, commenting that "it was sheer agony go out there and play like a bum." He therefore took two major actions. One dealt with the mental side of his game, the other the technical. Stated Casper:

I was strengthened by a Salt Lake City hypnotist. He sliced the positive things from my career and spliced them together for a positive attitude.

Then I went to school. Sounds funny, doesn't it? But, we are never too old to learn and a two-month drill with Phil Rodgers re-polished my game. I knew I needed some instructional help, but was too proud to admit it.

Athletes who desire to achieve their potential must work on all aspects of their sport—mental, physical, and technical. This is what Billy Casper came to realize, and when he did this, things began to turn around for him. His game revived, and Casper decided to join the newly-formed PGA Senior Tour. In 1981, his first year on the Senior Tour, he won over \$50,000, and in following years remained a leading money winner on the senior circuit. Casper cites three factors accounting for his success. They are: 1) his going to a hypnotist; 2) his attending the golf school, and 3) his playing the PGA Senior Tour, a tour which allows him to compete against players his own age.

Jane Blalock, winner of several tournaments on the LPGA Tour, considers the mental side of golf quite important. She told *Women's Day* writer Susan Edmiston that she engages in a meditation-like procedure before playing each round of a tournament:

I go into the locker room and find a corner by myself and just sit there. I try to achieve a peaceful state of nothingness that will carry over onto the golf course. If I get that feeling of quiet and obliviousness within myself, I feel I can't lose.[23]

The greatest player in the history of golf, Jack Nicklaus, uses a mental rehearsal technique while he competes. Nicklaus, who has won more major tournaments and money than any other golfer, employs imagery. Dan Lauck reports about how the imagery technique is woven into Nicklaus's game:

Jack Nicklaus stands there in the middle of the fairway and calculates. His caddy, Angelo, tells him the distance to the pin. Nicklaus judges the wind, Nicklaus asks for a club. He grips the club, stands behind the ball and looks toward the green, seemingly in a trance. What he is doing in this trance is imagining the shot. He imagines every shot; imagines setting up to the ball and swinging; imagines the trajectory of the ball; imagines the ball fading into the heart of the green, landing and backing up. He has been doing it for years and advocating that everyone else do it.[24]

Lauck is quite correct when he says Nicklaus advocates that every golfer should practice imagery; for example, Nicklaus's syndicated column of May 3, 1978 ("Play Better Golf with Jack

Nicklaus") contains this advice:

Confidence is the primary requirement in putting. If you think you'll make a putt, you probably will. If you don't think you'll make it, you almost certainly won't.

Form a positive picture in your mind of how the ball must behave to drop into the hole, then stick to your plan as you set up to and stroke the ball.

The imagery technique Nicklaus practices is easy enough for any golfer to do. Whatever your sport, you can employ the technique, modifying the mental picture to suit your needs. Imagery is not only easy to use, but highly effective. Ben Hogan, one of golf's greatest legends, had no trouble using imagery, and certainly was an effective shot-maker. Hogan, the four-time U.S. Open Champion, used imagery in much the same way that Nicklaus does. Dr. Maltz, in his book *Psycho-Cybernetics*, describes how Hogan employed the technique:

When Ben Hogan is playing in a tournament, he mentally rehearses each shot, just before making it. He makes the shot perfectly in his imagination—"feels" the clubhead strike the ball just as it should, "feels" himself performing the perfect follow-through—and then steps up to the ball, and depends upon what he calls "muscle memory" to carry out the shot just as he has imagined it.

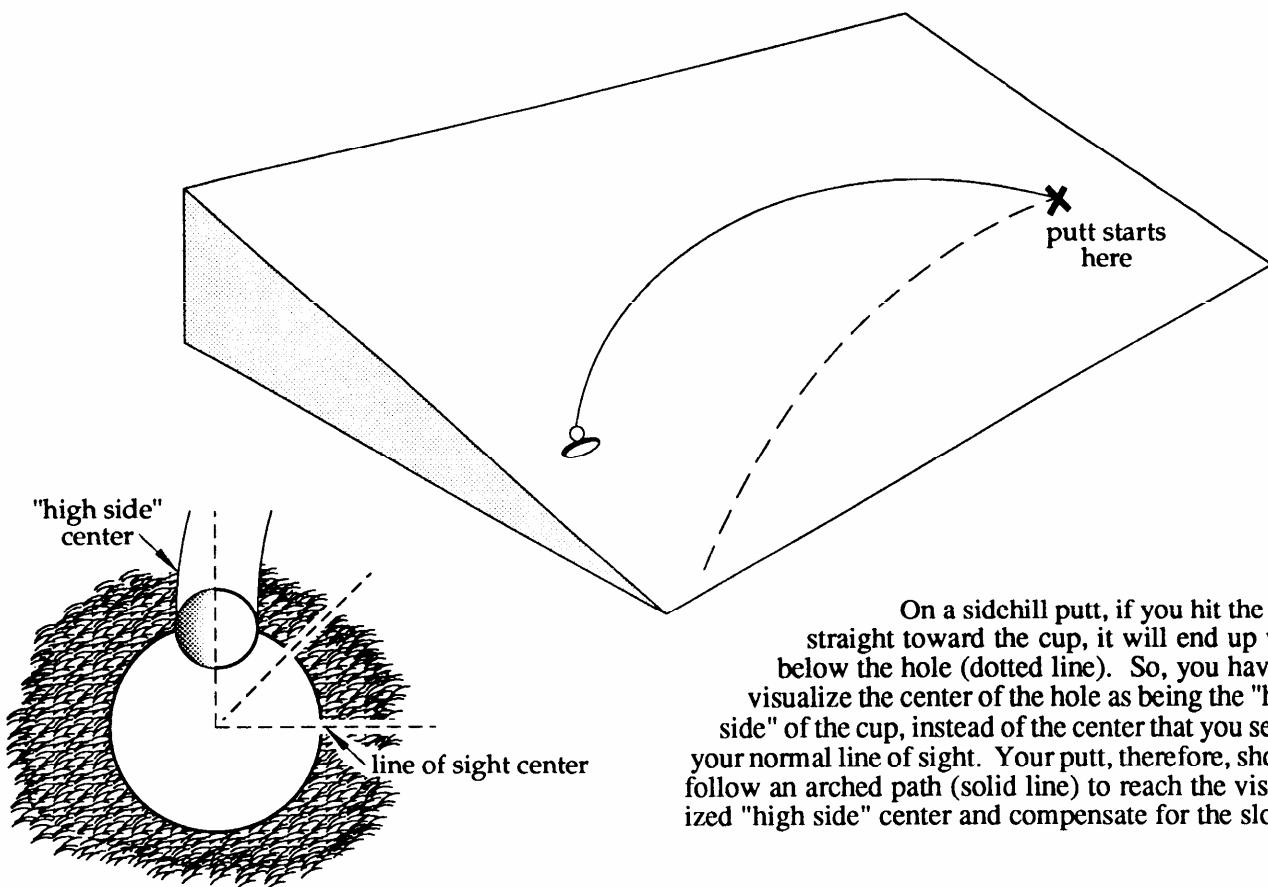
Hogan won the U.S. Open in 1948. The next year he was involved in a nearly fatal automobile accident. Doctors doubted that he would ever be able to walk again. Hogan not only recovered to where he could walk again, but also resumed playing tournaments. In 1950 he won his second U.S. Open, culminating one of sports' greatest comebacks. He followed this achievement with victories in the Open in '51 and '53.

Hogan used imagery on the golf course and off the course as well. Dr. Maltz says that "he kept a golf club in his bedroom, and daily practiced in private, swinging the club correctly and without pressure at an imaginary golf ball." Hogan's thorough job of mental rehearsal—using imagery *before* and *during* competition—sets a standard for athletes to emulate. If you feel that the use of mental disciplines will not help you because you are lacking in physical talent, keep in mind that Ben Hogan weighed only 135 pounds, and he made it to the top.

Why is imagery effective? Dan Lauck, looking into the matter, determined that psychologists can only surmise why it works. He reports that Dr. Thomas Tutko, author of *Sports Psyching* (1976), "believes that during imagery the mind acts as a computer, programming muscle actions for later on." Whatever the reasons, it seems you cannot lose by giving imagery a try. Nicklaus does not even close his eyes while employing the technique; so, practicing imagery places no special demands on you.

If you still have questions about how to go about using imagery for your golf game, read Tom Watson's outstanding book, *Getting Up and Down* (1983). Watson, perhaps the best golfer of the 1970s, advocates that you use visualization (imagery) while you play, and presents several illustrations in his book showing how your mind should be picturing a putt, approach shot, etc. For example, in *Getting Up and Down* he says this about a sidehill putt:

On all sidehill putts, consider that the center of the hole effectively shifts, and you have to visualize the center differently. You hear television commentators say a pro hit a breaking putt right in the center of the cup, but that's not correct. The "high side" of the cup becomes the center, and that's where you want the ball to enter. I've even had the ball drop in—literally—the back of the hole.



On a sidchill putt, if you hit the ball straight toward the cup, it will end up way below the hole (dotted line). So, you have to visualize the center of the hole as being the "high side" of the cup, instead of the center that you see in your normal line of sight. Your putt, therefore, should follow an arched path (solid line) to reach the visualized "high side" center and compensate for the slope.

With this advice to visualize the center of the cup differently comes a drawing, similar to the one appearing on this page. Another illustration in *Getting Up and Down* shows Watson mentally picturing himself hitting a perfect shot out of a bunker. Beneath this illustration appears the following recommendation, with the heading, "See the shot before you play it":

The most important aspect of any shot is to visualize what you want to do before you address the ball and swing. Visualization is creating a game plan. Visualize the ball flying through the air, bouncing, then rolling up to the hole.

Watson goes on to relate how visualization helped him save par on the ninth hole of the 1981 U.S. Open (he had hit into a deep bunker), recalling that "I visualized a six-inch landing area just over the lip, and then popped the ball up and hit that spot. The ball landed about three feet short of the hole."

One good visualization putting drill Watson illustrates is where you "just hit to an imaginary circle around the hole and try to leave yourself with second putts no longer than three feet." In the illustration a putter lies flat on the green, its head in the hole, and rotated 360 degrees, demarcating the circular area Watson wants your putts to stop in (the metal shaft portion of the club forms the circle's radius).

Throughout *Getting Up and Down* Watson offers several "mental tips" which often involve visualization. Each tip appears on a separate page for emphasis. If you are a golfer, these tips are definitely well worth reading. Watson's book, being one of the few sports books actually illustrating what the mind should be picturing during competition, qualifies as instructive reading for

most athletes; this is because, irrespective of one's sport, the illustrations make it easier to understand the principles of visualization. As the old saying goes, a picture is worth a thousand words.

Speaking of visualization, it was finally revealed that the Los Angeles Lakers utilized the technique during Pat Riley's tenure as head coach (1981-1990); this as reported by *Orange County Register* writers Laura Saari and Jane Glenn Haas. Saari and Haas relate in a July 1, 1990 article that Irvine Company owner Donald "Bren and Riley often discuss visualizing techniques—the psychology of imagery that Riley used with his basketball team." [25] Other important details, such as how often Riley had his players practice visualization, the *Register* reporters do not provide. We can say, though, that excellent results generally materialize whenever gifted and well-conditioned athletes participate in a properly-presented mental training program. And, in the case of the Lakers, under Riley's guidance, Los Angeles won the NBA Championships in 1982, 1985, 1987, and 1988, earning themselves the Team of the Decade (1980s) accolade.

In this chapter we have discovered how certain professional athletes—several of them superstars—improved their athletic performance by using imagery, self-hypnosis, meditation, or yoga. By so doing, these athletes also enhanced their earnings; in the case of Jack Nicklaus, for instance, we are talking about many millions of dollars in winnings and endorsements. Some pros do not want it known that they use mental training strategies. Perhaps this is because they do not wish to let their competition in on a good thing—and we cannot blame them for that! But, other professional athletes have stepped forward, publicly sharing their positive experiences with mental disciplines. We should listen to these athletes, for they have nothing to hide and a message to tell. And this message is: the regular employment of mental training strategies will definitely help you achieve and maximize your athletic potential. So, give them a try. You'll be glad you did.

FOOTNOTES

1. Bill Shirley, "The Eastern Bloc Comes Into L.A. With a Head Start," *Los Angeles Times*, January 25, 1984, Part III, p. 1.
2. "Sports and Hypnosis," *Bulletin of the Association to Advance Ethical Hypnosis*, Vol. 84, 1979.
3. Ibid.
4. William S. Kroger, *Clinical and Experimental Hypnosis*, (Philadelphia: J. B. Lippincott Company, 1977), p. 123.
5. Scott Ostler, "Chones Comes to Play as Lakers Top Pistons," *Los Angeles Times*, February 7, 1981, Part III, p. 1.
6. Scott Ostler, "The Philosopher Who Goes to the Boards," *Los Angeles Times*, November 13, 1979, Part III, p. 1.
7. "Kareem Realizes Importance of Being Kareem," *Los Angeles Times*, June 27, 1987, Part III, p. 18.
8. Rebecca Bricker, "Psychologist Barbara Kolonay Helps Athletes Train Themselves to Overcome the Clutch," *People Weekly*, February 1, 1982, pp. 33-37.
9. Kolonay gathered together a group of basketball players to improve their free throw percentage. She split the players into eight teams. Two teams she taught to use imagery, combined with a relaxation procedure. The players on these two teams, after going through a relaxation segment, were to imagine the entire free throw shooting sequence—from first approaching the line, to shooting the ball and watching it go through the basket. Needless to say, the two teams doing this improved more on their free throw shooting than the other teams. The improvement was approximately 6%. This may not seem much, but as any coach is keenly aware, the slightest improvement in performance can mean victory.
10. Michele Himmelberg, "Mind Games," *Orange County Register*, August 20, 1985, p. C1.
11. Ibid.
12. For the record, Portland finished the season in second place in the Pacific Division, but lost in the first round of the playoffs to Denver, 3 games to 1. After the playoffs Coach Ramsay, the second winningest coach in NBA history behind Red Auerbach, was fired, ostensibly because he did not get along with some of his players.
13. During his first two seasons with the Clippers, Benjamin performed, to phrase it charitably, considerably below

expectations, making Miller's optimistic assessment of the center seem way off the mark. An indication of how inaccurate Miller's assessment proved can be seen in the negative comments about the player that emanated from all directions, a sampling of which follows. Sam McManis, *L.A. Times* sportswriter, noted that "Benjamin's only consistency so far is that he's usually late for practice and is the Clipper most likely to miss a team flight" (see "Opportunity Knocks, but Benjamin Isn't Home", *Los Angeles Times*, November 29, 1985). Clippers Coach Don Chaney remarked after one game, "When I put him (Benjamin) in a game, I at least expect a few rebounds and (him to) run up and down the court. He's not going to play if he can't do that" (see "Clippers Lose to Warriors in Horror Show," *Orange County Register*, December 6, 1985). Meanwhile, Doug Moe, coach of the Denver Nuggets, characterized Benjamin as "a (expletive) dog" (see "Clippers Should Look to 1986-87," *Orange County Register*, March 11, 1986).

The purpose of this lengthy aside is certainly not to criticize Benoit Benjamin. Instead, I merely wish to point out that the use of personality tests, interviews, and the like in attempting to derive a "psychological profile" of an athlete can in many instances yield misleading information. The error becomes compounded if, thanks to the misread and/or faulty information, which is then combined with a desire to take action from such, management imposes some intervention strategy—we'll call it Solution X—upon Problem Y, when, in fact, Solution Y is what is really called for.

14. Michele Himmelberg, "Head Start: Psychological Tests Help Evaluations," *Orange County Register*, August 20, 1985, p. C7.
15. Don Greenberg, "Clippers, Others Wary of Draft," *Orange County Register*, June 22, 1987, p. D1.
16. Bill Shirley, *op. cit.*
17. Marty Bell, "Hypnosis in Sports: How to Slip Into a Trance and Out of a Slump," *Sport*, March, 1974, pp. 93-97.
18. Ralph Barbieri, "A Visit with Bill Walton... and from FBI," *Sport*, August, 1975, p. 74.
19. Jack Ludwig, *Games of Fear and Winning*, (Garden City, New York: Doubleday, 1976).
20. Dick Douce, "Hypnosis: A Scientific Training Aid for Bodybuilders," *Joe Weider's Muscle* magazine, July, 1979, p. 51.
21. George Leonard, "Redesigning the Body," *Esquire*, May, 1986, p. 146.
22. Art Parra, "Hypnotism and Schooling? Even the Pros Need Help," *Orange County Register*, May 5, 1983, p. E16.
23. Susan Edmiston, "Winners and How They Win," *Women's Day*, September, 1976, p. 174.
24. Dan Lauck, "The Science of Psyching," *Delta Airlines Sky* magazine, June, 1978, p. 25.
25. Laura Saari and Jane Glenn Haas, "The Man: Serious, Private and Driven," *Orange County Register*, July 1, 1990, p. N5.

MENTAL TRAINING STRATEGIES TIME LINE (TRACK & FIELD/LONG DISTANCE RUNNING)

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Biofeedback Training

(Superhuman feats of the lung-gom monks; Dr. Wenz's experiment)

Self-hypnosis Training

(*Ninja* learn both self-hypnosis and how to hypnotize enemies; discussion of Dr. Morgan and Dr. Kroger)

Dreamrunning for Enjoyment/Stress Reduction

(Jim Ballard discovered an entertaining dreamland through running)

Imagery Sessions

(Ed Burke practiced both external and internal imagery, as well as deep breathing; Bruce Jenner's workouts included such)

Setting Bold Goals for Oneself

(Advocated by many sports psychologists; Rusty Knowles' experience)

Visualization Sessions

(Willie Banks did his at night while in bed, a most effective time and place)

Hypnosis Sessions

(See George Frenn's work with Steve Brown; Arthur Ellen thwarted in hypnotizing Bill Toomey at USA-USSR meet)

Self-hypnosis Sessions

(Lisa Vogelsang held hers a half hour before competing, and between throws as needed; resulted in record)

TRACK & FIELD/LONG-DISTANCE RUNNING: RECORDS FALL TO VISUALIZATION AND OTHER MENTAL DISCIPLINES

There are few sports that require from the athlete such a large amount of motivation as track and field, and long-distance running. Athletes rarely become rich from participating in these two sports, and the physical demands are great. Getting in shape and staying in condition to seriously compete in events like the 10,000 meter run, decathlon, or discus is not the easiest thing in the world. Even the top athletes in track and field or long-distance running find it hard not to "throw in the towel" and retire. After all, it is no fun fighting pain, injuries, and poverty all the time. With two strikes against him already, the athlete in either of these sports cannot afford to possess a poor mental attitude. He cannot afford to compete without properly preparing himself mentally because if the athlete simply "lets the chips fall," he invites disaster; for a lousy performance during competition in a sport which seldom provides financial rewards even for great performances is devastating to one's morale. Whenever such a disaster befalls the track and field athlete or long-distance runner, he will often think to himself, "Why am I wasting my time on this?" Retirement becomes a viable option.

To overcome profitless "glory" many track and field athletes and long-distance runners use visualization, self-hypnosis, biofeedback, and other mental training strategies to advantage. In many instances, world records and national records have fallen after such strategies were adopted. In this chapter we shall note the experiences of some of these record-setting athletes who employed mental disciplines. You will see that they all followed the "Five P's to Success." The 5 P's are: Pre-Planning Prevents Poor Performance. By following the 5 P's, you too can achieve success. Become physically and mentally tough. To get mentally tough, regularly practice self-hypnosis or some other mental discipline.

Lisa Vogelsang, one of the champion athletes I have assisted, came to realize the value of the 5 P's; as a result, she ended up setting a national collegiate record in the discus. Her testimonial, which follows, illustrates the improvement you can expect to achieve by adopting a mental training strategy:

Before learning self-hypnosis I had thrown the discus for about 12 months, having a best mark of 154 feet, 1 inch. I had not thrown further than this because the discus was a new event for me, and I was having trouble learning to concentrate and compete in it.

In mid-February, 1977 I went to an all-comers track meet at Orange Coast College. My intention was to throw 160 feet. To my surprise, my arch rival, Monette Driscoll, showed up. I had not expected her to appear, and was not mentally ready to compete against her.

The competition began. Monette threw very far on her first throw, totally ruining my concentration. I began to press. In fact, of my six throws, five were fouls. My only legal throw barely went 150 feet. Monette smeared me.

At this time I knew a visit with Bob Stevenson [the author] was in order. So, the next day I learned self-hypnosis from him.

I quickly had a chance to apply what I had learned. The following day there was yet another all-comers meet, this time at University of California, Irvine. I went to the lady's room before the discus competition began; there I put myself in the hypnotic

state, and gave myself these suggestions: 1) "be relaxed and confident," 2) assorted technical suggestion, and 3) to "throw over 160 feet—a new personal record."

My warm-up tosses were great; some of these throws flew over 170 feet. During the competition, though, my first two throws only went in the low 150s. It was then that I realized that when I had told myself to "throw over 160 feet," I had not specified "in the meet." My third throw was a PR, but not over 160 feet. However, my fourth throw did go 161'3". Unfortunately, it was only a 4-throw competition; so, that was my last throw.

But, there is always another competition. At a track meet March 19 at Cal State Hayward I put self-hypnosis to work again. A half hour before the competition began I lied down under a tree near the discus ring, and put myself under hypnosis. This time, along with my regular suggestions, I gave myself the suggestion to set a PR of 165 feet.

My series turned out all right. My first three throws were 161'3", 160'5", and 160'10". These did not feel too good, but they weren't bad. At this point my coach informed me that Lyn Winbigler, another rival, had thrown one foot under the American record that day. This news motivated me to reinforce my suggestions. Doing it again helps.

I proceeded to finish my series with three tosses: 165'10", 163'10", and 167'10". This last throw established a new women's national collegiate record in the discus.

Four weeks later in April, 1977 at Cal State Long Beach, Lisa broke her own national collegiate record, this time throwing the discus 173'6" (see "Track Highlights," *Los Angeles Times*, April 17, 1977). Once again, Vogelsang used self-hypnosis to mentally prepare for the competition. "Self-hypnosis," she told me at the time, "has provided me the ability to relax and just throw. I can really feel what I'm doing, too."

Several years ago, Dr. George Knox, a U. S. Master's Track Team member, set age group records in the shotput, discus, hammer throw, and 7 1/2 mile run. Like Lisa Vogelsang he credited self-hypnosis for much of his success.[1] On the surface this should come as no surprise because Dr. Knox is former President of the Association to Advance Ethical Hypnosis. However, what makes the man's accomplishments particularly remarkable is that his involvement in track and field began only after he had suffered a heart attack. In a 10-year period after the attack Dr. Knox, using a lot of positive thinking, completely turned around his physical condition. This being the case, one can well appreciate Dr. Knox's partiality towards self-hypnosis.

Dr. Warren Johnson, a hypnosis expert, feels that there is a way to determine scientifically whether or not hypnosis definitely helps the athlete. In his paper, "Hypnosis and Muscular Performance," contained in *Contemporary Readings in Sport Psychology*, the following question was posed: "When an athlete performs well after having received hypnotic suggestions, might he not have done just as well on that occasion if hypnosis had not been employed?" Responded Dr. Johnson, "This question is unanswerable. Sports like track and swimming would provide an excellent testing ground for studying the entire question experimentally; but sports in which one is working directly against an opponent—sports like wrestling, boxing and football—would be useless in this regard because they lack controllable conditions."[2]

Dr. Johnson says track and swimming are ideal sports to test the effectiveness of hypnosis, because it is in these sports that one's time or distance might change if a new variable is introduced (such as the athlete practicing self-hypnosis while doing everything else in his training regimen the same). In the Swimming chapter we witness the case of the University of Oregon swimmers substantially improving their times after they incorporated self-hypnosis into their training regi-



(Bob Stevenson photo)

Lisa Vogelsang, who in 1977 set a NCAA record in the discus, adopted the traditional way to program oneself via self-hypnosis: she relaxed her entire body, then gave herself autosuggestions (which is what she is doing in this picture). Vogelsang employed this approach before breaking the record.

men; conference records and personal records were smashed. Swimmers attending Servite High School also experienced similar results with self-hypnosis. The Oregon and Servite swimmers were not part of an experiment, so strict scientific controls, of course, were not in place. It is reasonable to assume, however, that the basic outcome would have remained the same had such controls existed.

In track and field, several examples highlight the effectiveness of hypnosis. Lisa Vogelsang, after adopting self-hypnosis, improved her distance in the discus by 20 feet, and set two national collegiate records—all this occurring in the short space of two months. Another example, substantiating the dynamic potential hypnosis holds for track and field athletes, comes from the testimonial of Steve Brown. Brown, who set a national junior college record in the discus in 1976, had a taste of hypnosis, and came away from the experience a believer. He met George Frenn, the former world record holder in the 35-pound throw, who had introduced hypnosis to other athletes, allowing them to overcome various mental blocks. As Brown related to me, he took part in many interesting hypnosis sessions with Frenn during April and May, 1977:

I wanted to see how hypnosis would help me with my discus performance because I was at a disadvantage coaching-wise. I knew more about throwing the discus than the coach. As a result, I opened the track season really dynamite; then, I started stagnating.

Well, I met George Frenn, and we had these hypnosis sessions at George's house. Frenn would sit in a chair, and I'd lie on his goose down couch—really comfortable—and sprawl out. Then, Frenn would play a hypnosis record. The record would play and play, going through every muscle, telling to relax it; and I would get so relaxed. Then,

after the record ended, Frenn would start talking; he'd tell me the very same thing as the record did.

If Frenn thought I was deep, he tried to regulate my pulse rate. He would say, "Drop it! Drop your heart rate!" And it would drop right down. Then, when Frenn would start to get my aggressions going, I could notice myself grrr. He'd now quickly say, "Breathe easier, breathe easier. Relax, relax. Get back into it." And I'd go back and forth like that while listening to him.

Prior to a track meet against Washington State, Frenn had given me a bunch of hypnotic suggestions. The day of the meet I went over to George's, and as soon as I was to shake his hand, I'd be out. I would be hypnotized, and we would talk about my form and relaxation. We then went over to the track. When we got there, Frenn put me out again. He kept me under, but I knew what was going on (like we drank a Coke, ate a candy bar).

When it came time to throw, Frenn talked to me, and said, "Now, really relax with control. I want to see ten good throws—ten of the best you ever had!" So, I warmed up, and was shooting them out there. I had a couple over 200 feet, and I averaged 193 feet for the ten throws.

Steve Brown's national junior college record for the discus was 194'10", and his series while competing under the influence of Frenn's hypnotic suggestions nearly *averaged* that distance! Needless to say, he emerged from the competition with quite a positive opinion of hypnosis. He told me, "I advocate hypnosis. I'm all for it. I know it works. If I could teach myself self-hypnosis, it would be *very* beneficial for my discus throwing. I could put a percentage on that: 20-25%."

I mentioned previously the disadvantages of working with a hypnotist. One drawback is that the hypnotist may not be around when you most need him—in fact, may not be around, period. Steve Brown's hypnotist was Frenn. Unfortunately, the two had a falling out. As Brown observed, "My relationship with George Frenn has been resolved; it's just dissolved." His comment, "if I could teach myself self-hypnosis," meant therefore that he needed to learn self-hypnosis, or needed another hypnotist, if he were to continue benefitting from hypnotic suggestions.

I do not know if Steve Brown was successful with either quest; I only managed to talk with him once. However, his dilemma illustrates what can happen if you do not become **self-sufficient** in some mental discipline; you can find yourself way out on a limb, with the person on whom you are dependent for your mental preparation nowhere in sight. So, be your own coach, at least when it comes to your mental preparation for competition and workouts. Learn self-hypnosis, visualization, or some other mental rehearsal technique. By so doing, you will gain greater control over your athletic destiny.

Willie Banks, who in 1985 set the world record in the triple jump, enjoyed substantial control over his athletic destiny by being his own "mental coach." He did not rely on outsiders to get himself psyched-up for a meet. Instead, he used visualization, the easy-to-learn mental training strategy so many athletes have found helpful. Banks performed visualization to prepare himself for his world record jump of 58'11 1/2" set in May, 1985. We note this description the triple jumper gave the press about how he prepares himself mentally:

When I'm preparing for a meet, I'm laying in bed, going through the entire meet. Mental visualization. I go through the entire thing and I'm so into it, I'm sweating. Then I've got to take a shower. But then I don't have to think about it anymore. I just go out and do it, boom, go out and jump.

So I had already seen that I was going to jump a world record. I had seen it in my

head. I had this vision. I say it was a vision, like God said to me, "you're going to break the world record." I said, "thank you very much." [3]

Please observe that Banks did his visualization in bed. For most people one's bed is a psychological haven from all the distractions of daily life. The ordinary person usually feels very secure and at ease in his own bed. As a result, one attains a state of mind very conducive to the successful employment of self-hypnosis or visualization. This is because the element of relaxation helps make one more susceptible to suggestions; also, while in bed the person pretty much is isolated from outside disruptions. With an athlete the presence of these two favorable factors aids him in focusing his attention on what he wants to accomplish in an upcoming competition, workout, etc. Practicing visualization while in bed most assuredly worked for Willie Banks. Generalizing from this and the similar experiences of Muhammad Ali and Russ Knipp (see Boxing and Weightlifting chapters), it can be said: your own bed is an ideal location for you to conduct your favorite mental rehearsal technique.

Visualization has caught on with other track and field athletes. Rusty Knowles, a cross-country and steeplechase champion (1985-86) while attending the University of California, Irvine, incorporated the technique into his training regimen to good effect. Knowles happened to be a psychology major, which no doubt predisposed him to giving visualization a try. Working with Dr. Art Resnikoff, a sports psychologist at UC Irvine, he mastered the technique, and put it into practice. Knowles outlined to *L. A. Times* reporter Brian Hilderbrand his visualization routine:

What I normally do is just relax myself and concentrate on my breathing and feel myself get more relaxed. Once I'm in a relaxed state, I go over the race in my mind. I think what might happen, how I might feel, and think of the worst possible things that could happen. That way, I can see myself working through those obstacles. [4]

The 1985 cross-country season witnessed Knowles winning the Pacific Coast Athletic Association (PCAA) individual title, even though two teammates had run faster times than him before the final meet. It would be convenient to attribute this somewhat surprising result to the Irvine runner's use of visualization, except that Hilderbrand reported at the time that Knowles' "teammates consult with Dr. Art Resnikoff" also, meaning that they too may have been visualization practitioners. If this were true, why did Knowles win and not his "faster" teammates? An answer is suggested by additional information contained in Hilderbrand's report. What Knowles did, which his companions might have overlooked doing, is establish early on for himself the goal of winning the PCAA individual championship in cross-country. Many sports psychologists advocate that one set bold goals before undertaking an athletic quest (see Dr. Unestahl's comments in the Recent Developments in Sports Psychology chapter). Such high-reaching goals, especially for elite athletes, provide motivation. Knowles set a bold goal for himself and, thanks to a well-conceived blend of physical and mental training, attained it.

Another cross-country champion, Lynn Jennings, employs visualization in much the same way as Knowles. Jennings, a winner of three national TAC Cross-Country Championships (1987-89), runs a big race in her mind repeatedly in the days and weeks leading up to the competition. She calls this doing "your homework." Jennings related in a 1989 issue of *Runner's World* magazine why she believes that practicing visualization yields positive results:

Visualization is an important part of my training. Case in point: When I learned that the 1987 TAC Cross-Country Championships were going to be held in Van Cortlandt Park, on a course I had run many times during my collegiate years, I constantly visualized racing on the Van Cortlandt course during my training runs. I knew before the race started that I was going to win, because I had been over the course so many times. It worked, and I won the race.

Mental training also helps you avoid disaster. By running through the various sce-

narios that could occur in a race—losing a shoe, falling at the start—and figuring out what you would do, you'll be prepared to handle any that actually happen. You'll run more relaxed knowing you've done your homework.[5]

Los Angeles Times writer Beth Ann Krier uncovered an interesting fact about the use of visualization by U.S. decathlon champions. "In surveying the last five American gold medal winners," she stated in a 1983 article, "*The Times* learned that only one of them, Bob Mathias, who won the gold medal in 1948 and 1952, did not recall using visualization to perfect his performance." [6] The other four apparently learned and employed the technique on their own. For example, Krier informs us that "Bruce Jenner, the 1976 gold medal winner in the decathlon, says he has never had any formal psychological or psychiatric assistance. But Jenner says that he always 'went through visually in my head how far to throw the discus, how fast to run' and incorporated these visualizations or mental rehearsals into his workouts." Krier sums up the situation typified by Jenner's remarks this way: "It seems many Olympic athletes intuitively develop skills and training regimes advocated by psychologists without even knowing that they are doing so."

What these decathlon champions have done is fine, and who can argue with gold medal winners. But, there are better ways of going about learning and applying visualization than developing a homemade approach for oneself. San Jose State sports psychologist Bruce Ogilvie decries the self-concocted approach, and told Krier that "most great athletes do visualization or what I call visual motor rehearsal on their own. But they do it sloppily. Perfection is a ritual. We rehearse and rehearse and rehearse our athletes so that you could shoot a cannon off and they would still perform well."

When you practice visualization, your eyes should be closed and you already should be in a relaxed state; this generally enhances the technique's effectiveness. Sloppily executed visualization sessions, which Dr. Ogilvie says great athletes often unwittingly perform, contain one or more of these characteristics: 1) the athlete's eyes are open; 2) the athlete has not reached a sufficiently relaxed state; 3) the session lasts 2 minutes or less, instead of 10-15 minutes; 4) the visualized task is not vividly pictured or felt. Avoid these deficiencies, if possible, when practicing visualization.

Ed Burke, a three-time national champion in the hammer throw, met Dr. Ogilvie during his sophomore year at San Jose State; this as reported in the *L. A. Times*. According to Burke, Dr. Ogilvie "was instrumental in my breaking up through the ranks and making the (1968) Olympic team. Talking with him, I developed great insights into what was holding me back. He'd guide your thinking, and then, pretty soon, you'd be telling him what was holding you back." [7] Precisely how the sports psychologist guided Burke's thinking, we are not told; however, it would be logical to assume that the hammer thrower started using visualization at this time. Burke went on to set an American record, throwing the hammer 235'11" on June 22, 1967. He then retired from the sport after the '68 Olympics, but decided 12 years later to make a comeback after seeing a superior new throwing technique developed by the Soviets. In 1983, one year before the '84 Olympic Trials, Burke described how he was incorporating visualization into this workouts:

I'll sometimes sit down and wait 5 to 10 minutes between throws. I won't throw until I can first see the throw in my mind and feel it. After every throw, I write down what I felt, how far it went, any mental images I had and anything else that went on. I also learned how to breathe from the lower part of the stomach. Breathing up from the chest tightens you up. A lot of guys don't know that. [8]

Burke practiced both external imagery (seeing the throw) and internal imagery (feeling the throw), as well as stomach breathing (sometimes called deep breathing); the stomach breathing is meant to relax and energize oneself. Another thing the hammer thrower did was perform visualization during his once-a-week massage session:

At least most of that hour I'm mentally throwing. I'm deep breathing and deepening the relaxation. That's really a secret weapon I have.[9]

The physical and technical portions of Burke's daily regimen consisted of 2 1/2 hours of weightlifting, plus four hours of throwing. One can immediately see why mental training strategies such as visualization and deep breathing were called for: the workload was incredibly demanding. To avoid burnout, Burke resorted to a few mental "secret weapons," and profited from their use. At age 44, seventeen years after setting his American record, Ed Burke participated in the 1984 Olympics. He threw 221'6" in the Games, fourteen feet less than his old hammer throw record, and did not qualify for the finals. But, Burke's toss was the longest ever made by a 44-year-old in Olympic history, showing clearly the value of a combined mental and physical training program.

Although you should learn and regularly practice the mental discipline of your choice, it merits mentioning that some people have gotten by on much less. For example, there have been instances where an athlete has been hypnotized just once, and that one hypnosis session was all it took to permanently change the athlete's fortunes for the better. This is exactly what happened to Bill Toomey, the great decathlon champion and 1968 gold medalist. Toomey set a world record in the decathlon on December 10-11, 1969, scoring 8417 points. He had been trying to break the world record for a long time, but it was not until shortly after a hypnosis session with hypnotist Arthur Ellen that he accomplished his goal. The hypnosis session took place in late 1969 at Harrah's Club in Lake Tahoe. Toomey was there with Barry King, the British decathlon champion, and some other friends. I interviewed Toomey on November 21, 1979, and he discussed the incident:

We were in one of the side showrooms, and Arthur Ellen was doing his hypnosis performance. It was a pretty good act, with numbers and memory demonstrations. It occurred to me during the show that what Ellen was doing might relate to my sport. So, I wrote a note to Ellen, asking if I could meet him. He replied sure, and Barry King and I went to see him the next day in his hotel room.

At first there were a lot of people in the room. The hypnosis didn't work too well when all the people were there; it was like, "Gee, I better act like I'm hypnotized." Then, all the people left. I soon felt that something was happening. It wasn't that radical.

Toomey's most troublesome event in the decathlon had been the pole vault. Bill always had problems clearing the opening height. It turns out a mental block was responsible. As a boy, Toomey's right hand had been paralyzed, though it had not bothered him since he was 12 years old. Ellen helped Toomey realize that subconsciously he was disturbed by memories of his hand. He recalled:

We started talking, and then it came out. As soon as I said it, I said, "Jeez, that's amazing. It's true!" I was missing the opening height twice in a row just to show people that I had something wrong, but I never told anybody about my hand. I wanted to let people know that I could lose, but then I really didn't want to lose. It's funny, because after that [the hypnosis session with Ellen] I really liked the pole vault.

Despite the fact that one hypnosis session might lead to permanent improvement in your athletic performances, you should still learn self-hypnosis; the main reason for doing this is to free yourself from the inconveniences of working with a hypnotist (once you conclude the "permanent" improvement has only been temporary). Toomey neglected to do this. As a result, when he wanted Ellen to hypnotize him on another occasion, prior to a USA-USSR track meet, he experienced first-hand why it is inadvisable to expose yourself to the mercy of outside circumstances. Toomey relates what occurred:

Ellen tried to get out onto the field one time during the Russian dual meet. The officials threw him off the field, and some newspaper reporter commented that “the world missed its first Toomey 16 foot vault.” Ellen was at the competition, and I was going to go over and let him do a number on me. But, the officials wouldn’t let him come out; they decided they didn’t want to have any extra people out on the field.[10]

If Toomey had previously mastered self-hypnosis, he would have been able to give himself hypnotic suggestions on the spot. The officials would not have intervened because Toomey was a competitor and was therefore allowed on the field. He could “psych-up” and no one would have hassled him. Self-hypnosis is convenient to use and is virtually fail-safe from external interferences one sometimes encounters. Learn from Toomey’s mistake. Acquire the self-hypnosis capability.

The *ninja* of feudal Japan well appreciated the advantages of possessing the self-hypnosis capability. The ninja, Dr. Thomas J. Nardi tells us in a *Hypnosis Quarterly* article, “were experts in the nefarious arts of espionage. From early childhood these men and women underwent physical and mental training that far surpassed that of the ordinary warrior.”[11] Apparently, the ninja’s mental training consisted of learning self-hypnosis and its practical applications, as well as how to instantly hypnotize others. Notes Dr. Nardi, “It is reported that ninja could remain completely motionless for hours at a time, walk/run 350 miles in three days, and endure long periods of extreme cold, thirst, and hunger. All of this would be possible only if self-hypnosis was incorporated into their training.”[12] Being able to cover by foot 350 miles in three days indicates how much self-hypnosis might be able to help long-distance runners. For the ninja, however, such an exploit was of secondary importance. They were most concerned with escaping physical danger if they were detected and cornered while carrying out a mission. By preprogramming themselves to use a form of hypnosis on their pursuers, the ninja were able to “vanish.” If one can successfully use hypnosis on a hostile pursuer, does not this suggest that the tactic might also work against one’s athletic opponent? The reader might wish to refer to Dr. Nardi’s article as it reaffirms the value of gamesmanship and the 5 P’s (Pre-Planning Prevents Poor Performance).

In the days before the Chinese communists annexed Tibet and destroyed the natural order, selected Tibetan monks were trained to run enormous distances. Much like the ninja of feudal Japan, the monks would cover these long distances in an astonishingly short period of time. According to Pat Tarnawsky, who reported in *Runner’s World* the observations of Tibetan scholar Alexandra David-Neel, the long-distance running by the monks “has its root in a rite called *dubthab*, which was held every 12 years. The idea was to round up all the demons in Tibet and persuade them en masse not to demand human sacrifices.”[13] The monk chosen to round up all the demons was trained in the art of *lung-gom*, which David-Neel defines as “a large number of practices which combine mental concentration and various breathing gymnastics and aim at different results, either spiritual or physical.” The physical results were simply awesome, as Tarnawsky notes:

The runner selected for the roundup, a specially trained monk, was called the *Maheketang*. He would set out from the great monastery of Shalu on Nov. 11, run to Lhasa and several other cities, and be back in Shalu on Nov. 25. Then he would immediately set out again on the second, and longest, leg of his run. Going via Shigatze, he would make a huge tour through the Chang Tang highlands in northern Tibet, returning to Shalu a month later. He was running in winter, mind you, with only light monastic robes, non-stop between cities, no eating or sleeping on the way.

One monk covered more than 300 miles in 30 hours, nonstop... This would make about 11 1/2 2:37 marathons at once, or three consecutive 10-hour 100-milers (the current world 100-mile best is 11 hours 53 minutes). Obviously, something more than mileage and speedwork goes into this kind of performance. . .

Alexandra David-Neel watched two lung-gom artists in action. "She describes," says Tarnawsky, "their gait as something between running and race walking—a 'peculiar nimble springing.'" Continues Tarnawsky:

The first time she (David-Neel) saw one was a memorable occasion.

She and her party were travelling horseback across the Chang Tang, that desolate grassy upland. Suddenly they saw a tiny figure in the distance, coming toward them with unbelievable swiftness. It was not a part of Tibet where one ran into people, especially afoot, and they wondered who it might be.

Then her servant, looking through her binoculars, said, "It looks like a lung-gom-pa."

They watched, fascinated, as the man approached.

"I could clearly see his calm impassive face and wide-open eyes with their gaze fixed on some far-distant object..." David-Neel wrote. "He seemed to lift himself from the ground, proceeding by leaps. It looked as if he had been endowed with the elasticity of a ball and rebounded each time his feet touched the ground. . ."

As the monk passed, her servants bowed their heads to the ground. The monk took no notice, being in a trance.

Not wishing to disturb him, they let him get a ways ahead. Then they followed him on horseback, curious to find out where he was going. After two miles, the monk suddenly left the flat. He bounded off up a steep slope like a mountain goat and disappeared. Whether he'd done this to get away from them or whether it was simply his route, they never knew.

Tarnawsky believes that the monks trained in the art of lung-gom took part in an ancient version of biofeedback training. *Biofeedback training*, notes Tarnawsky, leads to the "learned voluntary control of physiological functions that we used to think were involuntary. The 'feedback' itself is direct information transmitted to the learner through electronic gadgets such as electroencephalographs." The monks, not possessing electronic equipment, learned to control their heart rate, body temperature, and so on by studying under a monastic teacher.

This old way of learning the principles of biofeedback, while commendable, undoubtedly requires more time than modern methods for one to achieve proficiency. As reported by C. Maxwell Cade and Nona Coxhead in their book, *The Awakened Mind* (1979), "a yogi, Swami Rama, said that when he returned to India, he would shorten the training of novice monks by starting them off with biofeedback instruments. Many years would be saved that way, he observed." How much time is saved in learning biofeedback with the aid of instruments? Obviously, it depends upon the degree to which you wish to master the technique. Generally, though, if you live in an urban area, it is not too difficult to find someone offering a 2 or 4-week biofeedback class; such a course should provide sufficient instruction for you to grasp the fundamentals.[14]

If you desire to enhance your running endurance via biofeedback training, you will probably prefer taking the 2-week course rather than subjecting yourself to the regimen the Tibetan monks face while learning lung-gom. This is evident when we note the training required of the monks. Says Tarnawsky, "The novice Maheketang had to do special breathing exercises in total darkness for 3 1/2 years. In one exercise, he would sit cross-legged, inhaling slowly for a long time, then leap into the air with legs still crossed, not using his hands. He would repeat this leap a number of times during each practice period. If he could leap twice his height, he was considered capable... In other words, if he were 5'5" he would have to leap 10'10" to be considered proficient."[15]

David-Neel points out that it is the mental part of the Maheketang's training which is upper-

most in importance. "It must be understood," she explains, "that the lung-gom method does not aim at training the disciple by strengthening the muscles, but by developing in him psychic states that make these extraordinary marches possible." It is clear that you must be both mentally and physically strong if you wish to maximize your athletic potential. By being able to leap twice their height, the lung-gom artists must be physically fit; yet, Tamawsky and David-Neel emphasize that a remarkably focused state of mind, developed through arduous mental training drillwork, is the key to making the monks' feats possible. Tarnawsky describes the Maheketang's state of mind while running:

When he is actually running, the runner repeats to himself a secret *ngag*, or sacred phrase. His breathing must be in rhythm with the phrase, and his strides keep time with both his breathing and the syllables of the phrase. He does not speak, or look from side to side, but keeps his eyes fixed on a distant object. Apparently he reaches a point where he does not feel the weight of his own body, and goes on thus for hours without pain or fatigue.

Reading this commentary about the lung-gom artist, one might wonder about the importance of the physical side of conditioning. An easy conclusion would be to skip the 15 miles/day workouts, and just enter the marathon, remembering to repeat a sacred phrase and breathe rhythmically the whole distance. But, make no mistake: athletic success depends just as much on possessing a physically fit body as being mentally tough. Still, it is a pleasant turnabout to see an example of physical conditioning aspects relegated to a secondary role, and therefore having to justify their importance. For in sports the reverse is pervasively the case. The coach subjects his players to hours upon hours in the weight room, endless drillwork on technique, double workouts galore, while absolutely nothing is done to help the athlete properly prepare his subconscious for competition.

Related to our discussion of the lung-gom artist, Dr. Thaddeus Kostrubala, well-known psychiatrist, makes an interesting hypothesis. He says that long-distance running is essentially the same thing as meditation. Both entail a repetitive aspect: in running, the foot strikes the ground unremittingly; in meditation, the person constantly repeats a word or phrase. The effect of each is to alter one's state of mind. In his book, *The Joy of Running* (1976), Dr. Kostrubala presents his hypothesis:

I liken . . . running itself to one of the major techniques of meditation, and sometimes prayer, employed by virtually all disciplines both East and West: the constant repetition of a particular word or series of words, whether it be, "Om, na pad na, om na," or the Hail Mary. It matters little what value that particular philosophy or religion attaches to the use of the word, phrase or prayer. It is clearly intended to be an opening into another aspect of awareness. In short, by means of the repetition, the phenomenon sought—namely, the touching of another state of consciousness—is achieved. I think the same process occurs in the repetitive rhythm of slow long-distance running. Eventually, at somewhere between thirty and forty minutes, the conscious mind gets exhausted and other areas of consciousness are activated.

We recall David-Neel's report that the lung-gom monk took no notice of the servants as he ran by, that his gaze was "fixed on some far-distant object." This can be attributed to the monk's intense mental and spiritual training; but, it also falls into line with Dr. Kostrubala's contention that long-distance runners achieve the same state of mind meditators attain. There is, of course, a major difference between meditators and long-distance runners. Meditators deliberately alter their consciousness whereas long-distance runners do so *inadvertently*. Of these two methods to alter one's state of consciousness—meditation or long-distance running—the athlete educated in the ins and outs of mental training would opt for meditation. Long-distance running is too much a hit-or-

miss thing when it comes to altering consciousness. Besides, it takes quite a while to attain the desired state of mind when you run (30-40 minutes according to Dr. Kostrubala). Meditation, by contrast, achieves its ends fairly quickly: 5-15 minutes; plus, you do not have to take a shower afterwards. The athlete seeking the benefits of meditation and whose sport happens to be long-distance running could try to get by with just his workout while dispensing with meditation sessions; but again, relying on the workout alone to deliver a pleasing altered state of consciousness is too haphazard. Unless one's running route is in an isolated area, interruptions from such things as cars, other people, etc. would continually hinder the development of the meditative state of mind.

As we have seen, the typical situation in sports today, despite a degree of progress on the mental training front, is for the physical and technical aspects of conditioning to be overemphasized. This usual situation was ameliorated somewhat in the women's track program at Cal State Hayward several years ago. A clinical psychologist at the university, Dr. Betty Wenz, taught biofeedback to various members of the women's track team. We read in the December, 1979 issue of *Runner's World* this report of Dr. Wenz's efforts:

"The goal is stress management that will result in muscle relaxation and increased concentration," Dr. Wenz said. "Then, when specific problems are identified (such as tight shoulder muscles in runners), biofeedback in the form of electromyography (EMG) or surface temperature gives the athlete an immediate physical indication of what is happening in his or her body, and when."

... The athletes are taught a simple series of exercises in which they recognize tension in muscle groups by consciously tensing and relaxing them. Eventually, tension can be recognized without the exercises. "Once this is accomplished," says Dr. Wenz, "EMG just gives visual proof that their muscles are tense." One difficulty Wenz has encountered is getting athletes to transfer relaxation techniques learned in the lab to competitive situations. To do this, Wenz teaches "self-biomonitoring," which involves recognizing tight muscles by touching them, and checking breathing speeds and rates of speech.[16]

One can sympathize with Dr. Wenz in her difficulty in "getting athletes to transfer relaxation techniques learned in the lab to competitive situations." We do not know enough details about what inspired the biofeedback training sessions; for example, did the women track team members volunteer or were they "volunteered" to learn biofeedback? We do not know. Consequently, we are in the dark about how motivated the athletes were to apply this particular mental training strategy to their event. However, the Hayward track coach, Harmon Brown, did offer his opinion of biofeedback, and how it affected the performance of six members of the team who utilized the technique regularly. Stated Brown, "It can be a useful tool in the hands of someone who knows how to teach it. Biofeedback does not drastically improve performance, but it does reduce stress, and that helps." Assuming Coach Brown's observation is correct, it appears that biofeedback in this instance proved mildly beneficial.

Keep in mind, even a mildly beneficial improvement can mean the difference between victory and defeat. Track and field is a sport of inches, seconds, and fractions of seconds. It is no fun losing a race by a tenth of a second, or the long jump by half an inch. Any athlete in track and field therefore should seriously consider investigating visualization, self-hypnosis, biofeedback, or other mental training strategies. Applying any of these disciplines may make the difference. Even if but a slight improvement results, be grateful. For slight improvements add up, eventually separating the champion from the also-ran.

A scientific estimate of the performance gain runners can achieve from applying self-hypnosis to their sport has been ascertained by Dr. William P. Morgan of the Institute for Aerobics Re-

search, in Dallas, Texas; as we recall from earlier in the chapter, this is something Dr. Johnson contended could be done. Dr. Morgan, in his article, "Mind of the Marathoner: Association and Dissociation from Pain" (see *Psychology Today*, April, 1978), relates how he tested the effects of dissociation on physical performance. Dissociation, he first of all informs us, is a "kind of self-hypnosis" which runners can employ as a "strategy for coping with the pain and discomfort of a long, competitive race." What is involved in using this strategy? Explains Dr. Morgan, "The runner who dissociates purposely cuts himself off from the sensory feedback he normally receives from his body," much like the lung-gom artists. The test results obtained by Dr. Morgan are predictable: people who dissociate demonstrate greater endurance. Here is Dr. Morgan's account of the test and the results:

We tested 30 young men on their ability to walk on a motor-driven treadmill until they were completely exhausted. The speed of the treadmill was 3.5 miles an hour, and the grade, or slope, was adjusted for each subject so that he had to work at 80 percent of his aerobic power (the maximum amount of volume of oxygen he can consume in one minute). In this initial test, the 30 men lasted, on the average, about 15 minutes before having to quit. Then, all were divided into two groups, dissociators and controls. We induced dissociation in one group by asking them to 1) stare at a specific object in front of them, 2) repeat the word "down" (a pseudo-mantra) with each leg movement, and 3) synchronize the repetition of the mantra and leg movements with their respiration.

The performance of the control group on the treadmill remained essentially the same in this retest, while the dissociators lasted an additional five minutes—a substantial gain. A second trial confirmed the performance gain of 30 percent. Not only were the dissociators superior to the controls in performance, but they also were significantly more effective than a third group, who were given a lactose capsule that was supposed to improve endurance but was really a placebo.

The performance gain of the dissociators was 30%! That is extremely impressive. It would seem that adopting some sort of dissociation strategy would put the runner on the road to athletic success. But, Dr. Morgan issues a strong warning for those runners interested in trying out such an approach:

Dissociation appears to be far more pleasant (than association), since it reduces anxiety, effort sense and general discomfort. On the other hand, the jogger who adopts it is more likely to suffer serious injury. The increased likelihood of stress fractures to the bones of the feet and lower leg cannot be ignored. The very real potential for heat stroke or heat exhaustion can lead to death or permanent impairment unless medical assistance is readily available. Finally, the beginning jogger should be warned that the quest for a "breakthrough" or "transcendent experience" can produce addiction and psychological trauma.

This stiff warning of Dr. Morgan's may be overstated, and is diametrically opposed to the position Dr. Kroger takes on the subject of what hypothetical dangers hypnosis poses the athlete. (For purposes of discussion, it is valid to compare dissociation with hypnosis, because Dr. Morgan calls dissociation "a kind of self-hypnosis.") Dr. Kroger, in his *Clinical and Experimental Hypnosis*, remarks that "there are no indications that he (the athlete) will drop dead 'in the stretch,' at least not from the effects of hypnosis." We have also noted in the Introduction Dr. Kroger's observation regarding the athlete who uses hypnosis: "There is no danger that an athlete will go beyond his physiologic limit. The built-in or involuntary reflexes protect the individual against danger at all levels." Dr. Morgan feels that a runner who dissociates might "suffer serious injury," but this is speculation. Until evidence is obtained showing that runners employing dissociation

have incurred more severe injuries than runners who do not use the technique, Dr. Kroger's position of reassurance seems the most logical.

Along these lines, Ingrid Kristiansen, who set the world record in the women's marathon at the 1985 London Marathon (with a time of 2:21:06), hoped to break 2:20 in the 1986 Boston Marathon. *Runner's World* writer Amby Burfoot reported her intentions:

"If you want to run very fast, you must be willing to gamble, and I am," Kristiansen said, repeating words she hears almost daily on audio tapes prepared by her sports psychologist. "It's better to take chances than to always play it safe. To try to run a 2:24—that would be too safe. If I see a 1:07 at the halfway, I will not be afraid." [17]

Burfoot did not identify who Kristiansen's sports psychologist is, nor what type of mental rehearsal activity the audio tapes had her engage in (though her repeating phrases contained on the tape indicates that hypnosis or self-hypnosis was involved). In any case, Kristiansen experienced menstrual cramps during the '86 Boston Marathon, and had to settle for a 2:24:55 time. Again, the mental training strategy used in this instance—perhaps hypnosis—did not cause Kristiansen to self-destruct, as Dr. Morgan warned; instead, the physiologic limit prevailed, as Dr. Kroger stated it would. Burfoot commented about Kristiansen's performance that "not fearing fear proved to be not enough"—the point being, the mind can only do so much; without the body completely healthy and ready to go, a top athletic performance is not in the cards. (Later on in 1986, Kristiansen set world records in both the 5,000 meters and 10,000 meters, establishing her supremacy in women's long-distance racing.)

The major portion of this chapter, like so much of the rest of this book, is geared towards the competitive athlete, one who enters races, meets, etc., constantly striving to improve his performance (distances, times, average, and so on). There are many athletes, though, who never compete. They "train" all the time, but only for physical fitness purposes and/or for fun. Long-distance running, due to its health-promoting nature, is one sport which attracts many such people. Strange to say, there have been a few books possessing a mental training orientation written for this type of non-competitive runner. I will briefly describe two of these books, and discuss the contents of a third at length.

Fred Rohe's *The Zen of Running* (1974) contains many pleasant pictures (beaches, forests, countryside, etc.), and puts the reader in the mood to enjoy running. According to Rohe, running "is a newly discovered form of meditation or one more way for you to discover you." The book generally attempts to encourage the reader to have fun while running, and represents a total departure from performance-oriented sports books.

Joel Henning's *Holistic Running* (1978) presents thorough advice and information on breathing exercises and meditation techniques for the runner. Henning details a 6-step program to develop one into the so-called holistic runner, whereby the person's body, mind, and soul are integrated (the bottom line being that a tranquil mental state is achieved during one's running session). This book promotes running as a mystical experience and as a means to personal growth, and is well-documented throughout.

The Dreamrunner (1982) by Jim Ballard clearly wins hands down for uniqueness. Regrettably, only a small private printing of the book was made, and therefore few people know about *The Dreamrunner* and its teachings. Basically, Ballard regards life as a dream, and contends that one can use certain "let's pretend" mental techniques while running to produce "an exhilaration, a felt harmony between body and mind." Ballard describes 46 different techniques, or "recipes for the sole" as he calls them, to help one become the dreamrunner. Before looking at these techniques, we should better understand where Ballard is coming from. Ballard reveals his outlook to us in his Preface to *The Dreamrunner*, stating:

When I started running eight years ago, right away I noticed that something kind of extraordinary was happening. The longer I ran and the more I observed myself, the more clearly I saw that a kind of intuitive shift was occurring for me in my experience of time and space while running. Further, I found that I could induce that shift by purposely practicing an imaginary reality or “dream” version of what was happening. . .

A result of my running researches into the altered experience of time and space was that I became convinced that time and space are not “real”; that is, they are not properties of the world at all, as we think they are. Rather, they are ways we have of organizing and explaining to ourselves what’s “real”, what is “out there” in the world. . .

Three years ago I spent four months living alone on an island, running and writing and observing myself. My stated purpose in being out there was to study the world and my life in it from the standpoint of its being truly a dream. Briefly stated, the results of my personal research into living as if life is a dream are as follows: (1) it works just as well as living as if it’s not; (2) it’s far less stressful; and (3) it works best if you keep it pretty much to yourself.

Ballard definitely is not interested in the competitive aspect of running—that is, winning races and lowering times. Instead, his emphasis is on altering reality, having fun and reducing stress. He says, “If life is a dream, then its purpose must be to be entertained;” and, according to Ballard, one of the best ways to entertain oneself is to engage in dreamrunning. He offers 46 mental techniques to help you shift your perception of reality while running, making the exercise more enjoyable and effortless, and life itself more pleasurable. Here is a sampling of some of these intriguing dreamrunning techniques:

NOW-HOLE

Fix your eyes steadily on the continuum of surface in front of you on which you run. Find the rushpoint, that area closest to your feet at which the surface details will just stay in focus, while all around it a blur of points are in motion, rushing outward toward you. Concentrate on that point for a time, and think of it as a hole through which the world you see is born each moment. Find a line in the rushpoint area just in front of which all details blur. Watch it, thinking of it as a cliff over which the things of now are falling. (If you close your eyes after running and concentrate on a point in front of you, you will see a moving replica of the now-hole.)

PHOTO NEGATIVE

Make the world be a photo negative of itself. As you run, make all solid objects, yourself included, be “air” and the air be “solid.” Note the shapes of air (solid) that surrounds objects like trees and cars, which are now space. You are a flowing, person-shaped vacuum. Feel the nothingness of your body meet the solidness of the air that moves through it. Feel the solid that pushes into your space and draws itself back out, with each breath.

TURNING AROUND

When you change directions, especially after running in one for a long time, a shift in psychic alignment can be felt. If you’re not running a loop and must turn around to go back, an abrupt realigning can be wrenching. Soften the turnback by running backwards in the old direction for a while, slowing down, and then beginning to move for-

ward. Or, spin some lazy circles on the run as you begin to slow for the return. With each rotation, feel your vision and your body gradually letting go of one point of the compass and taking up another. (An occasional spinturn or backwards-running as you're moving along can wake you up by showing you what's in the rearview mirror.)

IMAGE TALK

Pretend you can communicate with things through mini-pictures. If a dog makes a fuss, image it still. Or yourself and it by a fire, with your hand stroking its back. If you open yourself to this, do not be surprised if you get some messages back in pictures from dogs, cats, butterflies, birds, squirrels, etc. (To start, act as if what your mind images as it thinks is somehow influenced by the animal you're seeing.) You may find certain trees, crossroads, old houses and other places sharing memories with you.

SKYHOOK

Feel your running body hung in air, legs turning like a windmill, while again and again the earth takes a breath, rising to cushion your footfall, then descending again. Watch the earth rise and fall with each step, bouncing you along.

GIANT

Gaze down as from a great height at the details of your running surface. Observe them from 30,000 feet. Feel your great size and massiveness as you tower over a giant road. Remind yourself of a tiny creature, a minute replica of yourself, who runs "down there." And also of the one running in the sky behind you, gazing down. Run on into your giant, miniature world.

Before condemning these mental exercises as the ideas of a crackpot, it would be best to try them out. Personally, I believe there is much to be said for Ballard's ideas. For example, I tried out the Photo Negative technique on a breezy day, and it was quite easy to regard the air as "solid" and myself as nothingness. This was especially true going into the wind. Ballard's comments about backwards running in his mental exercise titled "Turning Around" also possess a lot of merit. As the author of the book, *Backwards Running* (1981), I can second Ballard's contention that running backwards will "wake you up by showing you what's in the rearview mirror." A section of my book, in fact, alludes to this beneficial feature of backwards running. The best quote I received on this subject came from Pat Murphy, one of the world's most incisive physical fitness authorities. He put it this way:

Man hasn't changed to this day. You have the lookers and you have the doers. When you're running backwards, the lookers are always the first to put in their little words of wisdom like "Hey, the world's going around the other way!" or "Do you realize where you're going?" When I pass people, they'll sometimes yell at me, "Why do you run backwards?" The easiest way to explain it, and not get too involved in a conversation, is to say, "I just wanted to see where I was, because I passed through so quickly." It kind of gives them a little chuckle, if nothing else. But, the lookers are always the ones who want to know something, because while the doers are out there doing it, the lookers want to know, "Why are you running backwards?" and "What are the benefits?" And, if the reasons you give them have any type of intellectual jab to them, the lookers might one day try it themselves.

As the old saying goes: **too old too soon, too smart too late.** The lookers find out in their later years what they should have been doing from the age of 15.[18]

Again, Ballard's mental exercises are not meant to help athletes win races, achieve PRs, etc. But, even competitive athletes are entitled to a change of pace occasionally so as not to get burned out. This being the case, employing dreamrunning techniques might prove valuable even in the context of a high-powered sports program. If nothing else, they provide the runner-athlete an alternative way to derive enjoyment from his workout.

We have seen in this chapter several examples of track and field champions who have benefitted from self-hypnosis, hypnosis, and visualization; we also noted how these kinds of mental disciplines hold great promise for long-distance runners. Non-competitive runners, we then witnessed, can use some interesting mental exercises to obtain greater satisfaction from their workouts. From all this it appears that the 5 P's—Pre-Planning Prevents Poor Performance—apply as much to mental preparation as they do to physical conditioning and the practicing of technical details. So, check out some of the many available mental rehearsal techniques, and see how they help you in your sport.

FOOTNOTES

1. *Bulletin of the Association to Advance Ethical Hypnosis*, Vol. 79, 1978.
2. Warren R. Johnson, "Hypnosis and Muscular Performance," *Contemporary Readings in Sport Psychology*, ed. William P. Morgan, (Springfield, Illinois: Charles C. Thomas, 1970), pp. 410-23.
3. John Strege, "Jumping for Attention," *Orange County Register*, July 29, 1985, p. C9.
4. Brian Hilderbrand, "The Dreamer: Reaching Goals Is Rusty Knowles' Specialty," *Los Angeles Times*, Nov. 17, 1985, Part III, p. 16.
5. "Mind Over Matter," *Runner's World*, September, 1989, p. 18.
6. Beth Ann Krier, "Olympians Exercising in Mind Arena," *Los Angeles Times*, June 7, 1983, Part I, p. 1.
7. "'Head' Coaching Helps Athlete Make Olympics," *Los Angeles Times*, June 7, 1983, Part I, pp. 19-20.
8. Ibid.
9. Ibid.
10. That Toomey felt the need to be hypnotized again is noteworthy because supposedly he practiced visualization. *Los Angeles Times* writer Beth Ann Krier reports that "Bill Toomey... recalls using visualization automatically although it was never prescribed. 'It's your third workout. You can do it before you go to bed every night,' he advises" (see "Olympians Exercising in Mind Arena," *L. A. Times*, June 7, 1983). Like Willie Banks and other champion athletes, Toomey practiced his version of visualization in bed at night. Even so, he sought more mental assistance from hypnosis, which he might have regarded as a more powerful and effective mental preparation technique than visualization.
11. Thomas J. Nardi, "Hypnosis in Feudal Japan," *Hypnosis Quarterly*, Vol. XXI, No. 2, 1978, pp. 16-19.
12. Ibid.
13. Pat Tarnawsky, "Mind-Body Regulation," *Runner's World*, April, 1973, pp. 16-19.
14. For a center near you, write: Biofeedback Society of America, 4301 Owens St., Wheat Ridge, Colorado 80033.
15. Tarnawsky, *op. cit.*
16. "Sport Biofeedback," *Runner's World*, December, 1979, pp. 11-13.
17. Amby Burfoot, "The Old and the Renewed," *Runner's World*, June, 1986, p. 40.
18. Robert K. Stevenson, *Backwards Running*, (Fullerton, California: Stevenson International, 1981), p. 23.

MENTAL TRAINING STRATEGIES TIME LINE (SWIMMING)

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Hypnosis Sessions

(Dr. McCall hypnotized Servite high school swimmers, who proceeded to record lifetime bests; similar results attained by University of Oregon swimmers after Coach Schleicher introduced hypnosis into their workouts)

Self-hypnosis Sessions

(Servite high swimmers, water polo players; Univ. of Oregon swimmers)

Visualization Sessions

(Mark Spitz held three main ones the night before, the morning of, and just before the race)

Release of Nervous Energy Mentally Stored Beforehand

(Chris Coveney)

“Mobilization of the Will”

(Gurov *et al* brought this about with posthypnotic suggestions)

Visualization Sessions

(University of Iowa swimmers; to maintain his motivation Mark Spitz imagined things while training, like a lovely girl at the end of the pool)

Comprehensive Mental Training Program

(University of Iowa swimmers followed one developed by Dr. Gauron, each athlete possessing a mental training handbook; “psychotrainining” by Gurov taught Moscow team swimmers self-hypnosis and visualization, resulting in PRs during the USSR championships)

Attain One’s Optimal Arousal Level

(Accomplish this just before the race; Dr. Raiport favors pulse rate as the measure of arousal; Dr. Nideffer used skin conductance)

SWIMMING: MENTAL TRAINING LEADS TO SELF-IMPROVEMENT AND VICTORIES

Swimming is a sport where mental toughness plays a large role in determining who will win the race. Swimmers not only must overcome their opponents and own self-doubts, but also the drudgery of their workouts. Workouts easily become boring because the scenery does not vary; the pool never changes its location or size and shape. So, the swimmer must find a way to motivate himself to endure the lap after lap routine. Mental rehearsal techniques have enormously benefitted many swimmers by: 1) helping them to achieve their athletic potential during competition, and 2) inspiring them to complete long and demanding workouts (the completion of which is necessary for the attainment of peak physical condition).

Mark Spitz, winner of a record seven gold medals during the 1972 Munich Olympics, often used an imagery-like technique during training. Spitz, in his book *The Mark Spitz Complete Book of Swimming* (1976), relates what he did to combat the monotony of his workouts:

There are a few tricks you can use during training since you have to think about something while you are swimming back and forth, back and forth. I used to think of different things to keep my interest up. For instance, once I used the image of a beautiful girl at the other end and I would really be swimming hard to get to her. It was kind of a game. You couldn't be thinking of a girl all the time since that'd get to be old hat. But you have to think of something at least part of the time since after a while training gets to be a lot of dull, hard work.

Note that Spitz did not do a formal relaxation procedure before performing the imagery. Most psychologists contend that imagery yields better results if the athlete practices the technique while in a relaxed state. However, this does not mean that the technique will not prove effective when performed under other circumstances. For example, golfers, such as Jack Nicklaus and Tom Watson, have experienced tremendous success with imagery while employing it during competition; and, the technique has benefitted them without their relaxing prior to using it (see chapter on Professional Athletes). In Mark Spitz's case, a formal relaxation procedure was probably unnecessary because the repetitive nature of the workout—stroke after stroke, lap after lap—perhaps induced a light hypnotic or meditative state of mind in him (see Dr. Kostrubala's ideas on running and meditation in the chapter on Long-Distance Running). Spitz was therefore susceptible to suggestions, and when he practiced the imagery, he accepted the impression as real, swimming faster and farther as a result.

Spitz also mentally prepared for an upcoming race in a systematic fashion. States Spitz:

I took time to think quietly. I used to make a point before I went to bed to think about the meet the next day for maybe five minutes. Then I would put it out of my mind and go play cards or something else. Then I'd wake up in the morning and think about it again just before breakfast. Then a couple of minutes before I would get up for the competitive event, I would do it again. I would concentrate on what I wanted to do, how my competition was swimming, how well I felt, and then I would go in and swim.

The quiet thinking Mark Spitz did probably can be categorized as visualization. He did this in the evening before going to bed, and in the morning after waking up, times when the mind is very receptive to suggestions. The mind is slipping out of consciousness in the evening, and into consciousness in the morning; in both cases thoughts reach the subconscious level as well as the con-

scious mind (see Jimmy Grippo's remarks in the Boxing chapter). Providing the thoughts are right, the athlete will become properly "programmed," allowing for the total manifestation of potential come competition time. Spitz also repeated his visualization process a couple of minutes before each race. This served to reinforce the instructions he had given himself in the previous mental rehearsal sessions.

It can be seen that Mark Spitz left little to chance. He mentally rehearsed what he wanted to do in the race, doing so at least on three separate occasions in the day leading up to the event. While he could have done even more mental preparation (for example, as some sports psychologists advocate, performing his quiet thinking each day during the week leading up to the competition), this was no doubt unfeasible for Spitz because he competed in so many events. Spitz entered and won these seven races in the '72 Olympics: 100 m freestyle, 200 m freestyle, 400 m freestyle relay, 800 m freestyle relay, 100 m butterfly, 200 m butterfly, and 400 m medley relay. To do three mental rehearsal sessions every day for each of these seven events, or a total of 21 mental rehearsal sessions daily (147 sessions weekly), would certainly not leave time for much else; plus, the mental jugglery involved seems daunting. So, the problem Spitz faced was just the opposite of most athletes: he had to avoid doing too much mental preparation, not too little. Clearly, he found the right solution.

The important thing for one to understand about Spitz's example is that he *consistently* used forms of visualization during workouts and in preparing for competition. Employing mental training strategies obviously worked for him, but realize that such strategies can help any swimmer improve his performance, a fact the following story demonstrates.

On October 4, 1979 I visited Servite High School, a Catholic boys prep school in Anaheim, California. I went there with the intention of talking to Mike McCall, Servite's swimming and water polo coach at the time. A July 1, 1977 *Los Angeles Times* article, "Sometimes a Good Swim Can Be Most Entrancing," had aroused my curiosity. As reported in the article, Coach McCall asked his father, Dr. W. C. McCall, to hypnotize the entire team. The 1977 Southern California interscholastic swimming championships were approaching, and Coach McCall wanted his team to produce a super effort. Dr. McCall, past president of the American Institute of Hypnosis, was up to the task. He hypnotized the swim team, and we note in the *Times* article what then happened:

The results were dramatic. All six (swimmers) recorded their lifetime bests in the meet. Servite finished fourth in the championships, won by San Marino.

Says Dr. McCall: "All I had to do was to reach the swimmer's subconscious by hypnotizing him and he corrected his efforts." [1]

Seeking to learn more about this incident, I managed to talk to Jeff Riddell, a varsity water polo player for Servite in 1978 and 1979. Interestingly, Coach McCall had also taken the high school's varsity water polo team to his father to be hypnotized. Riddell recalled the hypnosis session:

Coach had us go down one day to Dr. McCall's office, which is just down the street in a medical building. There were about 19 of us, the entire water polo team—all the varsity players. Dr. McCall brought us in, sat us down, and talked to us for a while. He told us to be real relaxed and all that stuff. Then he had us hold our arms up. Everybody did it. Dr. McCall also told us, "Your arms are concrete" and that we couldn't move them. Then he told us that we could move our arms. I guess we were hypnotized right then.

Dr. McCall told us to think of a corner of the goal. See the ball and catch it, and think of the corner of the goal: that's where we were going to throw it. He said, "Just

think of the ball going into the corner of the goal.” Dr. McCall also said, “Think of it like kinetics. If you think that’s where the ball’s going to go, that’s where it will go.” We did this half the time we were there.

Coach had written down our personal faults that we needed help on, and so Dr. McCall went through these with each one of us individually. He spent maybe two minutes with me. Dr. McCall just said, “Jeffrey, here are your legs. You need help on your legs because you don’t get out of the water.” And he goes, “From now on you’re going to work real hard on your legs, and you’re going to practice that.” Dr. McCall also said, “From now on you’ll play with your hands up on defense.”

According to Riddell, Dr. McCall also told everyone on the team that they had to study. In Riddell’s case this suggestion apparently helped because he said he ended up doing better than usual in his classes that semester, earning B’s.

The hypnosis session took place right before the start of the regular season, and everyone on the team seemed to profit from it. Informed Riddell, “The whole team’s play improved a lot. Our record was 16-6. We went to the quarter-finals of CIF (the Southern California high school championships) where we met El Dorado, and they were rated #2 in the nation. They won, but we played a really good game against them. Our overall record was the same as last year’s team; but, the year before we were supposed to have a lot of superstars on the team—and they lost in the first round of CIF!”

The hypnosis did not transform Servite into the national champions; but, it did inspire the players to practice and play hard, facilitating the realization of their full athletic potential. You cannot ask for more from any mental training strategy. The hypnosis session with Dr. McCall, explained Riddell, “helped us from then on, because we were thinking, ‘Well, if we have to do it, we might as well.’ That was the attitude.”

Although Dr. McCall hypnotized the water polo team only once, a most exciting spin-off occurred. Several of the players figured out how to hypnotize themselves! More than this, these players began practicing self-hypnosis regularly. “Right now,” Riddell noted when I talked to him in 1979, “there are a lot of guys who before each game like to hypnotize themselves. They call it ‘psyching up.’ They sit down, shut their eyes, and think of the water polo ball going into the goal.”

This is an important story for any junior athlete to remember. It shows that self-hypnosis is extremely easy to learn and use. The Servite players took no expensive classes or read any books on hypnosis. Instead, they were hypnotized just once, by the coach’s father. But, that one session was all it took for them to realize how they could hypnotize themselves. Because another coach took over the water polo assignment from McCall the following year (1979), these players were clearly using self-hypnosis on their own initiative. This voluntary practice must mean that the players found self-hypnosis helpful. If it was not, they would not have bothered with it.

These young water polo players set a tremendous example. Here were young men only 16 or 17 years old using self-hypnosis before each game. They figured out how to do self-hypnosis on their own, and practiced it on their own. No one told them they had to use it. This demonstrates a high degree of self-discipline and motivation—traits that are becoming hard to find in young men these days. Self-hypnosis, of course, will not provide you these traits. However, if you already possess a good strong character, it can definitely unlock the door to making you a much better athlete. The Servite High water polo players were impressive on both accounts, and this no doubt is why their example is so uplifting.

Dr. McCall asked for no money for the hypnosis session; he did ask for some recompense, though. As Riddell related, “After he was done, he said we owed him a favor. So, that weekend

we went to his property. We cut down a couple of trees and carted them away."

After talking to Riddell, I went to Dr. McCall's office. Dr. McCall, a general practitioner, was in. Although quite busy, he chatted with me briefly. He said that besides the Servite High swimmers and water polo players, he had hypnotized football players, tennis players, baseball players—athletes in several different sports. He had, however, turned much of the sports hypnosis work over to his associate, Nick Lewter, who served as the hypnotist for Jerry Quarry and other boxers (see Boxing chapter). Most sports hypnotists and sports psychologists I have encountered simply do their own thing, and do not coordinate their activities or share their research with anyone else. Dr. McCall and Nick Lewter, though, teamed together. The success Lewter's athlete-clients have obtained, following in the footsteps of the success Dr. McCall's athlete-clients enjoyed, illustrates the benefits increased cooperation between sports psychologists can yield.

I wanted to follow up on the Servite High story, because I was especially interested in learning if a self-hypnosis tradition had developed in the school's swimming and water polo program. In 1982 I talked with Steve Larkin, a varsity water polo player for Servite. He was a freshman at the school in 1979, and did not recall the seniors using self-hypnosis; apparently neither the seniors nor the new coach taught the technique to the underclassmen. So, once Coach McCall left, it was only a matter of a year or two before the use of self-hypnosis died out completely from the Servite swimming and water polo program. This development shows why it is important for Athletic Directors to establish some sort of policy stipulating that athletes out for sports be exposed to mental training strategies. This type of policy-making has been done with weight training, which, after proving its value, has become the newest "must" in many sports (baseball and tennis most noticeably being the latest sports to adopt it). By making it a *policy* to introduce athletes to mental rehearsal techniques, a coaching change will not drastically affect the mental preparation portion of the athlete's training regimen. So, just as *continuity* is insisted upon for the physical and technical preparation portions of sports programs, so must continuity be provided for the mental preparation portion as well.

We have seen how self-hypnosis and hypnosis can help high school swimmers and water polo players. College swimmers can also take advantage of the techniques. Richard Schleicher, former head swim coach for the men's team at the University of Oregon, brought hypnosis into the lives of his swimmers. We read this account which appeared in the Winter, 1979 issue of *Old Oregon* magazine:

"Concentrate on goals," a man is saying in the steamy gloom. "Every day, every day will be an excellent day, an absolutely outstanding performance. You'll be good each time, getting better and better and better . . ."

The speaker is Richard Schleicher, the University's head men's swimming coach. His audience—stretched out on mats before him, breathing slowly, deeply, regularly—is this year's team.

And they are hypnotized.

Schleicher continues, droning, repeating, urging, bolstering. His tone is compelling, and his voice, echoing, seems to come from all around the hallway.

"You'll be good each time, if not excellent, getting better and better and better . . ." Words like "strength" are used, "stamina" and "power, power, power."

Each team member is visualizing an upcoming race, seeing himself in the water, confident, ahead of his competitors, his body transformed into a powerful, thinking, efficient, unrelenting, swimming machine, pulling, stroking, driving through the water.

"At the clap of my hands, we'll be through. You'll be totally relaxed, totally re-

laxed, refreshed, relaxed. . .”

The handclap reverberates through the hallway.

The team members begin to stir and sit up, some looking a little dazed, others like they've just awakened from a short nap. Uniformly, they seem pleased with the experience, relaxed and confident.

“Awright!” says one swimmer, stretching. “Better than eight hours sleep.”

“It takes me about 15 minutes to come out of it totally,” says another. “It's fantastic, like waking up to a brand new day. If you had any hassles before, they just don't seem to matter. I can go ahead and practice away from any other concern.”[2]

Judging by this account, Coach Schleicher hypnotized the team, rather than each member of the team hypnotizing himself. This top-down approach possesses certain drawbacks, such as: 1) the coach might not be a good hypnotist, 2) the coach might not be available to hypnotize the team when the swimmers could really benefit from a hypnosis session, 3) hypnotic suggestions from a coach generally have less impact than autosuggestions the athlete, skilled in self-hypnosis, chooses to give himself. In the story, one swimmer, while enthusiastic about how hypnosis helped him get through the day, admitted that “it takes me about 15 minutes to come out of it totally.” It should not take so long for one to return to normal consciousness; a minute at most is sufficient. This points out the difficulty that any coach may encounter as a hypnotist, particularly the suitability of the instructions he gives his athletes as he dehypnotizes them; in the case of the Oregon swimmers the instructions were “you'll be totally relaxed, totally relaxed, refreshed, relaxed. . .” The heavy emphasis on being “totally relaxed” may be the reason why the one swimmer took “about 15 minutes to come out of it totally,” while some of the other swimmers emerged from the hypnotic state “looking a little dazed.” An emphasis on feeling “refreshed” would be more appropriate, probably, than a “totally relaxed” state.

The other concern this account raises—the swimmers being hypnotized rather than taught self-hypnosis—is dispelled later in the article. The team members, it turns out, were able to learn self-hypnosis from Coach Schleicher, and hypnosis was not imposed upon the team. *Old Oregon* reporter John Thomas informs us:

Then, as now, Schleicher introduced hypnotism to the team on a voluntary basis—the swimmers could take it or leave it. And he stressed that the swimmers would only train and prepare with hypnosis and never compete while in a trance state. Many of the team members were interested but skeptical, others just skeptical.

One skeptic, senior Paul Buvick, learned to put himself under by taking three deep breaths and counting slowly backward from 10. Using hypnosis to prevent himself from having sleeping problems and “choking” during competition, Buvick made the transition from Van Rossen's (the previous coach) team to Schleicher's, working himself up to a more prominent position on the team.[3]

Another swimmer, Jay Evans, learned that taking deep breaths and relaxing the mind work best for him when he wishes to enter the hypnotic state. Thomas reported that Evans “uses hypnosis in training to overcome the ache of muscular fatigue and labored breathing. He begins the relaxation in his mind and lets it trickle into his body. Self-hypnosis, he says, can be useful any time you get frustrated. ‘What you have to do is take a few deep breaths. The deep breaths are important.’”

In the Introduction chapter, I pointed out that if you use self-hypnosis during a time out or break in the competition, there is the chance that your opponent or the spectators might talk to you, thereby disturbing or ruining your chain of thought. The solution, of course, is to prepare

yourself ahead of time; give yourself autosuggestions before the competition, and do so in a place where there are no distractions. Comments made by one swimmer on the Oregon team, George Koch, point to the wisdom of this precautionary strategy. As related by Thomas, Koch "regards a hypnotic 'set' as very private. 'I don't like any kind of disruption or invasion while I'm in a set. I'm likely to haul off and slug someone who breaks in.'"

One concludes, after reading all the testimonials contained in Thomas's article, that the Oregon swimmers obtained substantial benefits from practicing self-hypnosis and from participating in Coach Schleicher's hypnosis sessions. But, how did the hypnosis affect the Oregon swim team's won/loss record? This is difficult to determine, but a strong case can be made for hypnosis providing a positive contribution to Oregon's swimming program. In Schleicher's first year as coach (1977), the team finished the season with 6 wins, 5 losses; in Schleicher's second year (1978), the swim team won 9, lost 2, placing first in their conference (NorPac—Northern Pacific Athletic Conference). Also, as reported by Thomas, "six varsity records, 11 freshman records, and six NorPac records were set, along with 72 lifetime-best swims for team members."

Coach Schleicher's effort was remarkable, especially in that he exposed his swimmers to hypnosis on a voluntary basis. The slowness in which some of his swimmers came out of the hypnotic state does not seem to have negatively affected their performance. The swimmers are also to be commended, of course, for giving self-hypnosis a try. Their experience with self-hypnosis reconfirms the incisiveness of the observation made by Dr. James Esdaile, the great 19th Century surgeon who used hypnosis to anesthetize his patients: "*Riches await the men of clear sense who know how to turn new truths to practical purposes.*"

Schleicher no longer coaches the Oregon swim team, and one wonders if any mental rehearsal training is being done anymore by the Oregon swimmers. Again, a policy which calls for all participants in a university's intercollegiate sports program to be exposed to mental training strategies would minimize the impact of coaching personnel changes, at least in the area of the athletes' mental preparation. Such a policy should not make it mandatory for the athlete to try out any particular technique, such as hypnosis; however, the policy should require that the athlete be thoroughly informed about the value of such mental disciplines. After being so informed, the interested athlete should then be provided necessary materials and assistance to learn and apply whatever mental rehearsal technique he thinks might help him. The athlete not interested in investigating mental training strategies should not be hassled or pressured into using them. In short, 1) use of mental rehearsal techniques is voluntary; 2) exposure to the benefits the techniques provide is mandatory; 3) materials, sports psychologists, etc. to help the athlete with his mental preparation are always available. These are the three key elements of a policy which colleges wishing to upgrade their sports program should adopt.

A good example of how such a policy might work in practice is provided by the University of Iowa sports program. Dr. Eugene Gauron, a professor of psychiatry at the university, has served as a "mental coach" for many of the school's sports, most noticeably swimming. Dr. Gauron describes his work with the University of Iowa men's swimming team in his excellent book, *Mental Training for Peak Performance* (1984). The swimming coach, Glenn Patton, invited Dr. Gauron in 1979 to work with the team; a multi-year working relationship between Dr. Gauron and the swimmers ensued.

During his first five years of work with the swimmers, as well as with other U. of Iowa athletes, Dr. Gauron developed a comprehensive mental training program, the details of which he presents in his book. Based on his experience, he believes that seven elements comprise the ideal mental preparation package for athletes:

1. Well-practiced relaxation exercises to calm the body at will.
2. Rehearsed techniques to generate and expand energy.

3. An awareness of your own body's stress profile.
4. Specific focusing exercises to quiet the conscious mind and focus awareness.
5. Extensive practice with mental imagery and facility at the applications of visualization, especially mental rehearsal.
6. Skill at using specific techniques, such as repeating personal affirmation statements or calling to mind previous success experiences, to keep self-confidence at high levels and to overcome self-doubt.
7. Knowing how to reframe, to change thoughts, to stop thoughts, to recognize areas of irrationality and perhaps most importantly of all—the ability not to think at all.[4]

Throughout his book Dr. Gauron explains how the athlete can learn and apply each of these skills and self-awareness tools. In actual practice this meant that Dr. Gauron helped teach the athletes various mental rehearsal techniques, and worked with them for the entire season. He also, though, recognized that he could not always be around whenever athletes wanted to work on their mastery and application of mental preparation skills. So, he developed material on the subject, which he gave to the athletes. “I have discovered,” notes Dr. Gauron, “that handouts are invaluable as part of a mental training program. Athletes accumulate them as part of a mental training handbook and refer to them during the season.” Dr. Gauron’s giving the athletes handouts to put in a mental training handbook qualifies as an excellent service, because an athlete’s forgetting details is not limited to just the physical and technical aspects of his particular sport. The Iowa athletes, thanks to their possessing a mental training handbook, could always brush up on what they had to do to properly carry out their mental preparation, and could do so without having to track down Dr. Gauron. If Dr. Gauron became ill or unavailable for some reason, the athletes still had the mental training material to guide them.

Dr. Gauron’s philosophy is that you assist the athlete in his mental preparation as much as possible, but that providing such assistance is not the same thing as assuming responsibility. Speaking to the athlete Dr. Gauron remarks, “It is your responsibility to get mentally ready for anything you intend to do. No one else can do it for you.” As for which mental discipline the athlete should use, Dr. Gauron says to “try out the exercises;” then, “judge for yourself what works and what does not work based on your own experiencing.” It can be seen that Dr. Gauron’s approach is to **expose** athletes to various mental preparation tools, but he does not force them to use visualization, self-hypnosis or any other particular technique.

How did the University of Iowa swimmers respond to Dr. Gauron’s assistance? Based on individual testimonials and the team’s overall performance, one would have to say extremely well. In a five-year period from 1981 the team finished first twice, second twice, and third once in the Big 10 Conference. However, it is the individual swimmers’ testimonials and experiences which reveal the most about Dr. Gauron’s work. Matt Wood, the Big 10 50-yard freestyle champion in 1982 and 1983, and 100-yard freestyle champion in 1983, had a lot of positive things to say:

I must start by saying that I feel fortunate to have been exposed to all of the material and techniques that Dr. Gauron has presented to the swim team during the four years I have known him. I have assembled my personal mental training book with over 200 pages of different handouts and techniques.

Before I came to Iowa, I was made aware of what simple visualization could do for a person during my senior year in high school. I did not realize how I as a student and athlete could use it until I met Dr. Gauron.

The many techniques have definitely been valuable to me during my college life

from mental preparation for a swim meet to relaxing and calming myself before taking an exam to visualizing a speech in advance to give myself confidence. . .[5]

Two key phrases appear in Wood's testimonial. The first is his mentioning that "I feel fortunate to have been exposed" to mental rehearsal techniques, etc. Wood was "exposed" to such techniques, not forced or coerced into using them. Athletes pressured into practicing mental rehearsal techniques they feel are inappropriate will react just as negatively as when they are forced to practice physical and technical drills which they regard as pointless and counterproductive. Matt Wood, thankfully, was not placed in a "like it or not" position of having to practice visualization or some other mental discipline. The other key phrase in Wood's statement appears where he describes having a "personal mental training book with over 200 pages of different hand-outs and techniques." This shows the extent to which Dr. Gauron went to provide the Iowa athletes as much information as possible on mental training; it is quite apparent that the athletes always had something substantial to refer to.

Dave Ross, a talented backstroker, worked with Dr. Gauron on the eve of the 1983 Big 10 meet. According to Dr. Gauron:

Dave was doubtful about his swims on the following day. He was troubled by questions of how well he was prepared to do at this meet. Dave and I talked about going for it all and being as good as he could be. We adopted a metaphor about "going to Oregon," which referred to the pioneers who left everything behind and trekked across inhospitable territory to reach the "promised land." Dave overcame his fears of greatness to become a Big Ten champion in three events. How much further will he allow himself to continue on his "journey to Oregon" during his senior year?

How Ross "overcame his fears of greatness" remains nebulous. Probably more was done than just adopting the "going to Oregon" metaphor and talking things over. One suspects that some mental rehearsal technique akin to autosuggestion was involved. Dr. Gauron ends the story by wondering how well Ross would do in 1984, the swimmer's senior year. The answer is that Ross repeated as Big 10 champion in all three events—the 100 m backstroke, 200 m backstroke, and medley relay.

One of Ross's teammates on the 1984 Big 10 champion medley relay team was Chris Coveney, a breastroker. Dr. Gauron described Coveney as a swimmer who usually was "bothered by excessive nervous energy the closer he gets to his race." Coveney, says Dr. Gauron, turned this handicap into an asset by feeling the energy and storing it; the energy ultimately was "liberated later in the race when he will need it." The storing process occurred mentally. How this mental storage was accomplished Dr. Gauron does not specifically spell out. One assumes again that Coveney, having been exposed to various mental rehearsal techniques, used some sort of visualization procedure; we assume this because of the "feeling" aspect of what he did and also because of Dr. Gauron's emphasis on visualization in his chapter on mental preparation for competition. In any case, the stored energy came in handy. States Dr. Gauron about Coveney:

When he reaches the last 50 yards in his event, noting that he is beginning to feel tired and that his arms are hurting, he calls forth the nervous energy that he had mentally stored away before the beginning of his event. He is able to feel strong and to swim fast right to the wall.

Distance swimmer James Lory mentally prepared himself for his workouts and races by visualizing himself hooked up to an energy machine. The machine had a scale reading from 0 to 100. Informs Dr. Gauron, "James usually starts at a reading of 20 to 30 on the meter. He remains attached to the energy machine until the readout hits 100." Once the readout hit 100, Lory felt fully energized, ready for his workout or race.

What is evident from the Iowa swimmers' experiences is that they personalized the mental rehearsal techniques to suit their individual needs. One swimmer would mentally store energy, another would imagine being hooked up to an energy machine, and so on. This fact highlights another important reason why it is prudent to expose athletes to mental preparation disciplines, rather than force them to use any particular mental technique. Everyone is unique. A mental training strategy that works for one athlete will not work for another. The athlete, having been introduced to and presumably tried out various mental rehearsal techniques, will settle on the one he feels works best for him. What he settles on will probably differ greatly from what his teammates use. But, this is of small consequence because what the coach should strive for is not uniformity in whatever mental discipline his team uses, but instead regularity in his players employing any mental technique that they choose. If a mental training program is properly presented to the athletes, as the case at Iowa with Dr. Gauron exemplifies, then regularity will occur without any difficulty; the athletes will *voluntarily* use mental disciplines of their own choice for workouts and competition, and such use will invariably yield better performances.

In his chapter on mental preparation for competition, Dr. Gauron lists several practical pointers for athletes to follow. He reemphasizes the importance of the athlete being responsible for his own mental preparation. Having a back-up technique to use in case the primary technique doesn't do the job is suggested. Also, the athlete should perform his mental preparation far in advance, not wait until five minutes before the competition begins. There then appears the recommendation for the athlete to "visualize, visualize, visualize; do not stop visualizing." These major points Dr. Gauron makes about mental preparation for competition are quite good, and seem to address most contingencies. To provide further assistance to athletes and coaches interested in mental training, Dr. Gauron offers three tapes containing the mental training exercises described in his book.[6]

Dr. Gregory Raiport, a medical doctor who was on the Soviet Olympic staff as a sports psychologist for the 1976 Games, finds that an athlete's level of arousal largely determines how well he will perform. Stated Dr. Raiport in a *L. A. Times* article, "Every person has an optimal mood for his optimal performance. Some need to be angry, one needs to be happy, one needs to be afraid."^[7] Raiport then cited the case of a British swimmer who swam faster than usual when he imagined a shark chasing him. "But," observed Raiport, "another swimmer would panic and wouldn't be able to swim at all. Each person has his own motivation." Dr. Gauron points out in his book that an athlete does not perform better the more aroused he is; rather, there is generally some point between a low level and a high level of arousal that allows the athlete to function at his best.

Dr. Gauron does not say how this ideal level is determined, but Dr. Raiport does. He says that you count the athlete's pulse, and note his performance. It obviously might take you several workouts to determine which heart rate leads to the best results; eventually, though, you obtain a good idea. Then, you apply that knowledge. Informs Raiport, "If he has the best results when his pulse is 130, the next time he (competes) he should bring his pulse to 130." Dr. Raiport mentions an unidentified skeet shooter he worked with, who was not having a good day. "His pulse was 95," recalls Raiport, "and I knew his optimal was 120. So I made him run and got him angry. His pulse went to 123 and he began shooting very well."

An athlete whose heart rate is too high before competition would be wise to practice some calming mental discipline such as meditation. Dr. Gauron, in fact, discusses an incident involving Iowa swimmer Steve Harrison who, an hour before a Big 10 Conference backstroke final, "was out of control emotionally in a too aroused state. Steve eventually calmed down and got his emotional arousal under control by being led through a relaxation exercise." Unfortunately, the relaxation exercise was too little too late, and Harrison did not swim up to his best. The leading theory for this result was that too much energy had already been wasted, which was more than the relaxation exercise could compensate for.

Sports psychologist Robert Nideffer investigated the relationship between level of arousal and athletic performance. His subjects were members of the University of Rochester swim team. To determine the swimmers' level of arousal Dr. Nideffer measured skin conductance. Whereas Dr. Raiport indicates that a level of arousal which allows one athlete to perform well might cause another athlete to do poorly, Nideffer's findings reveal a general pattern. In his book, *The Inner Athlete* (1976), Dr. Nideffer reports:

I measured his (the swimmer's) skin conductance at each meet in order to find out how anxious he was. Then, after all five races, I compared his time for the race in which he was least aroused with his average time across the five races or with his time when he was most aroused.

What we discovered was that the more aroused the swimmer, the poorer he performed. In fact, if the swim-team members when they were least aroused could actually swim against themselves when they were most aroused, they would cut an average of 3.3 seconds off their times.

A difference of 3.3 seconds does not attract the notice it deserves. Dr. Nideffer, realizing this, emphasized the significance of his findings in a novel way. "A dual-meet score," he pointed out, "would have been 77-10—that is, the low-aroused individuals beat themselves by a score of 77 to 10. (The high-aroused team got its ten points for just being in the meet.)"

Whether the general pattern Dr. Nideffer found (low-aroused swimmers perform better than high-aroused swimmers) holds true for most other swimmers is a matter of vital importance to all swimming coaches and competitive swimmers. The answer to this question directly affects how one involved in the sport should go about his mental preparation.

It would seem that Dr. Raiport's approach, though, of using the heart rate as the way to measure level of arousal, would be preferred over Dr. Nideffer's practice of measuring skin conductance. No instrument is required to perform the former, making it a flexible and easy procedure to follow, whereas a device is needed to carry out the latter. Measuring arousal via skin conductance means that a machine must be maintained, an operator for the machine has to be trained and available when needed, etc. In short, a skin conductance reading is not as convenient to do as merely having one take his pulse. This difference between heart rate and skin conductance as measurements of arousal has competitive implications as well. Other teams and opponents will not be tipped off that anything concerning the swimmer's psychological state is being attended to if all they see is the swimmer and/or coach taking the swimmer's pulse. Athletes take their pulse all the time for many reasons; it is not an unusual sight. A machine hooked up to an athlete, by contrast, is a rare sight and might raise eyebrows if the process of measuring skin conductance took place at poolside in full view of the opposition. Gaining a competitive edge does not come easy. Therefore taking one's pulse to determine level of arousal—an unassuming, unsuspicious, and practical method—appears the best way to go.

Soviet scientists V. M. Gurov, A. M. Svyadoshch, and L. T. Jampolsky researched the effects of mental training and self-hypnosis on the performance of top Moscow swimmers. The scientists divided mental training, which they call "psychotrainining," into three stages: Stage I — initial autosuggestive training; Stage II — training in autosuggestion of positive sensory hallucinations (mental images); Stage III — goal-directed training. In their paper, "The Suggestive Method of Preparing Athletes for Competition," Gurov *et al* note that "the first two stages are preparatory and common to athletes in different sports," while the third stage "requires taking into account the competitive peculiarities of each sport." [8]

The Soviet scientists' comments about Stage I are quite interesting:

Training is started with the mastery of autogenic training or any other auto-

suggestive technique. At this stage, the main purpose is not the technique, but establishment of contact (*rapport*). To this end, psychological examination with follow-up dialogue is used. The discussion with the athlete, supported by data from the experimental-psychological examination, reduces personal resistance, elevates the psychologist's authority, and places the psychologist and athlete in the necessary relationship for psychotraining. When contact (*rapport*) is established, it is easy to teach the athlete to call forth the autohypnotic state with muscular relaxation and a sense of heaviness and warmth (the first stage of the self-hypnotic trance. . .).[9]

The remark about “the discussion with the athlete... reduces personal resistance” indicates that some Soviet athletes, just like some U. S. athletes, are wary of mental training, possibly regarding it as some sort of mind control; as a result, such athletes need to be won over. (Recall the initial skepticism of the Oregon swimmers to Coach Schleicher’s hypnosis sessions.) This emphasis on the importance of establishing “contact,” meaning rapport, has been seconded by many other hypnotists and sports psychologists (refer, for example, to Arthur Ellen’s account of Dr. Tracy’s work with the St. Louis Browns—Baseball chapter).

After rapport has been established, Stage II is undertaken, whereby the athlete learns how to attain a medium depth self-hypnotic trance. Achievement of this skill leads to Stage III, the implementation of which varies depending on the sport and the individuality of the athlete. Gurov *et al* consider swimming a “cyclical sport” and therefore contend that four elements need to be covered in goal-directed training (Stage III):

- a) modeling of pre-start states;
- b) modeling the start and the coverage of the early segments of the distance;
- c) modeling the first stage of fatigue;
- d) modeling the second stage of fatigue and the final acceleration.

The scientists had each swimmer engage in a visualization process (the “modeling”) closely resembling the visualization exercise Dr. Kolonay had the Phoenix Suns perform (see the chapter on Professional Athletes). For example, the swimmer heard this type of message for the pre-start state:

Imagine that you are in a group of swimmers awaiting the start. When you have this clearly in mind, let me know by raising your right hand. Good. Lower your hand. You feel slightly uneasy. You are a little nervous, but less than usual. You have done a lot of preparatory work, and now the time has come for you to show what you are capable of. Today everyone is seeing a new high-class swimmer, capable of swimming ... meters (figures supplied). You know that this is a routine time for you. You can do it on any occasion, under any conditions. You are an athlete who has already swum these times and you are ready for a new personal record. You are confident of this and now everyone will see it. . .

Before conducting the “modeling” session, the Soviet scientists consulted the swimmer; they then modified the pre-start message according to the athlete’s needs and special circumstances. Therefore no two visualization exercises were exactly alike, which is the correct thing to arrange because every individual is different. Though Gurov *et al* tailored their work to each swimmer, they made sure that every pre-start message contained a core of certain essential points. For instance, the scientists always included the remark that “you are a little nervous but less than usual;” they did so because, in their opinion, “it is incorrect to suggest complete absence of uneasiness. . . Athletes produce their best results in a state of slight nervousness.” Gurov stressed that “in nearly all cases the suggestion should be of confidence in one’s power,” which is pretty much what Coach Schleicher preached to his swimmers while they were hypnotized.

The scientists next presented the swimmer a lengthy visualization message pertaining to the start and early portion of the race; the basic theme was "you are swimming unbelievably easy." For the following stage—the first stage of fatigue—a much different emphasis was provided. The swimmer imagined this situation while in the autohypnotic state:

Fatigue is increasing gradually. The feeling of lightness is diminishing. The desire to slow down the tempo is appearing. When you feel this, let me know by raising your right hand. (The right hand is raised.) Drop your hand. This is a natural feeling. Everyone experiences it. Your opponents are now experiencing the same thing you are. They are even more tired than you. The real competition is just now starting, the competition between will powers...

Gurov *et al* note that fatigue can be handled at first with a "mind over pain" approach. The swimmer, say the Soviet scientists, mobilizes his will power "by direct autosuggestion, aimed at improved execution of the task, and by means of stimulating aggressiveness, of competitive 'anger.'" Soon, though, even this so-called "mobilization of the will" no longer works. Fatigue is too great; pain is too intense. At this point the second stage of fatigue is reached. To overcome the extreme pain and fatigue felt at this stage, Gurov *et al* state that "it is necessary to be able to stop feeling one's body;" in fact, they continue, "the final acceleration should be attained by means of suppression of the instinct of self-preservation." How is this accomplished? The scientists say that "this can be achieved with the help of appropriate posthypnotic suggestions." Though Gurov *et al* do not list examples of appropriate posthypnotic suggestions to use for this situation, it probably is not too difficult to think up some that would work.

The "psychotrainining" procedure which the Soviet scientists introduced to the swimmers is interesting, but was it effective? If you have read the preceding portions of this chapter, the answer to this question will not surprise you. Reported Gurov, Svyadoshch, and Jampolsky:

The above-described method was used during the preparation of Moscow team swimmers for the USSR championships of 1977-78. All athletes produced their best performances or improved them without any negative effect on health.

The scientists were quick to point out that "competitive results can not be linked only with psychotrainining" since "an enormous number of factors affect performance." Nonetheless, the Moscow team swimmers repeated the success experienced by the University of Iowa swimmers, University of Oregon swimmers, Servite High School swimmers, and Mark Spitz—swimmers who used self-hypnosis, hypnosis, or visualization to set records and achieve personal bests.

Gurov *et al* believe that for top swimmers to improve, the adoption of mental training strategies holds out the best hope for such improvement to occur. Increased physical training, they indicate, will only prove counterproductive. "At a time when (physical) training has become maximally voluminous and intensive," they observe, "further increases in specific work are undesirable; therefore, utilization of autosuggestive hallucination (visualization) opens new avenues for increasing sports mastery." This opinion mirrors that held by many U. S. sports psychologists. Dr. Gauron, for example, states that physical training "seems to have gone about as far as it can," while mental training "is an idea whose time has come." So, whether the scientists are Soviet or American, there seems to be common agreement on the value of mental training, certainly as it relates to swimming.

In this chapter we have seen how mental training strategies have helped swimmers and water polo players maximize their athletic potential. Several different mental rehearsal techniques were discussed, all of them generating considerable benefits upon application. This variety of techniques was presented because everyone has his own preference and idea as to what works best for himself. Dr. Gauron advises that one should carefully scrutinize different mental disciplines because "no one can claim to have a corner on the (mental training) market in terms of effective-

ness." He continues, "Be skeptical and critical," but ultimately be open-minded and adventurous. Give one or more mental disciplines a try.

FOOTNOTES

1. "Sometimes a Good Swim Can Be Most Entrancing," *Los Angeles Times*, July 1, 1977, Part III, p. 2.
2. John Thomas, "The Power of Positive Swimming," *Old Oregon*, Winter, 1979, pp. 16-18.
3. Ibid.
4. Eugene F. Gauron, *Mental Training for Peak Performance*, (Lansing, New York: SportScience Associates, 1984).
5. Ibid.
6. The three tapes sell for \$30, and are available from: SportScience Associates, 82 Sperry Lane, Lansing, New York 14882.
7. Bill Shirley, "The Eastern Bloc Comes Into L. A. With a Head Start," *L.A. Times*, January 25, 1984, Part III, p. 1.
8. V. M. Gurov, A. M. Svyadoshch, L. T. Jampolsky, "The Suggestive Method of Preparing Athletes for Competition," *Soviet Sports Review*, Vol. 15, No. 2, June, 1980, pp. 53-56.
9. Ibid.

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MENTAL TRAINING STRATEGIES TIME LINE (WEIGHTLIFTING)

Hypnosis Sessions

(Soviet weight lifters; the Bulgarians also use music to enhance concentration; Peter Siegel; Terry McCormick)

Autogenic Training and Autosuggestions

(Advanced lifters participating in experiments by Arkhangorodski *et al* and Seimuk *et al* greatly improved their performances from using these mental techniques)

Self-hypnosis Sessions

(Russ Knipp started giving himself autosuggestions 2 months before a big meet; Marshall Morris blended visualization with self-hypnosis while warming up with light weights)

Simulation of

Competitive Conditions

(Michael Mahoney)

Mastery of Visualization

(Garfield says elite level Soviet weight lifters possess this; Russ Knipp; Kasyanik's study showed the value of "ideomotor tuning" for lifters)

Use of Self-hypnosis before Attempting the Lift

(David Rigert; Anatoly Pisarenko)

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Use of Electrosleep during Competition

(Kopisov and Nagorniy showed that this provides many benefits)

WEIGHTLIFTING: MIND OVER MATTER

Weightlifting is one sport where the effects of mental training have been extensively studied. Also, international class weight lifters have used self-hypnosis and other mental training strategies to advantage for years; some of these lifters have done this on their own, while others have utilized mental rehearsal techniques under the guidance of sports psychologists and coaches. The nature of the sport has probably contributed to this substantial application of and research into mental training. After all, in weightlifting you either successfully lift the bar or you don't; "almost" does not count in this sport. The tremendous weights involved, plus the perfect form required to properly lift the weights, place great demands on the athlete's concentration and psychological state. As a result, mental disciplines are called upon and investigated for their possible and actual benefits.

I talked to champion weight lifter Russ Knipp about his use of self-hypnosis (the complete interview is contained in *Hypnosis Quarterly*, 1978, Vol. XXI, No. 4). Knipp dominated the 165-pound class from 1966 to 1972, setting 9 world records and 34 national records. He competed in the 1968 and 1972 Olympics, and set one of his world records at the '72 Munich Games. Knipp told me how he learned self-hypnosis on his own, how most athletes could benefit from practicing this mental discipline, and he discussed many facets of hypnosis of special interest to weight lifters. Knipp clearly knows what he is talking about, and his remarks should be reviewed carefully—not only by athletes, but also by coaches. Here is what this weightlifting champion has to say:

I started to dab into hypnosis when I was in high school. I wasn't even competing at the time, but I just took an interest in hypnosis. A teacher taught a course after school for anyone who was interested. I went to a few sessions and read up on it. I turned out to be a light tracer; I didn't go into any deep trance. But, I had a very strong belief factor, just depending on who would put me in a trance.

My last year in high school I began competing. At that time I started working on self-hypnosis. In fact, I worked at learning self-hypnosis for five years—it wasn't something that happened overnight—to the point where I could totally relax.

At first it was more of a way to relax. Because in competition, if you're too excited and too nervous, you wind up exploding and not doing anything right. So, I thought of relaxing; and yet, with the relaxing I'd bring out a state of aggression at the same time.

I used self-hypnosis primarily in preparation for my meets. I personally feel it has to occur in your training; you have to concentrate in training. Because whatever you do in training you're going to do in competition. If you're a haphazard workout type of athlete, leaving things up to chance, and say, "Gee, I'll get super psyched at the meet—I'll do it all at the meet," then you're just fooling yourself.

After all, in Olympic lifting it's *controlled* strength. You have to control your emotions, control your feelings, and pull for a position. Then, once you hit that position you explode.

I know that the Japanese do an awful lot of concentration in their workouts. They take their training extremely serious. And they're the fastest moving athletes in competitive lifting. Very explosive. The Japanese are very slow off the floor, waiting for that position; but, they move with such fantastic speed it's unbelievable. They reach a

position and just go; they don't hold anything back. And that's where hypnosis will help our athletes in lifting.

Depending on the type of meet—national championships or world championships—I planned at least a good two months in advance. I gave myself hypnotic suggestions mainly on concentration. I'd go through a systematic thinking of what lifts I'd be making, how I would approach the bar, and so on.

I'd do this every night when going to bed, and it would take me about two or three minutes to go under self-hypnosis. I worked to the point where I heard nothing. I then went through a series of suggestions of relaxing every muscle. After that I concentrated on one focal point. My focal point was the midsection; you know the power of your strength comes from the midsection. So, I blocked out all noise, controlled my breathing, and thought of nothing—reaching a point of total relaxation. And then I went through the lift step by step. I'd do this five, ten minutes, and fall asleep doing it.

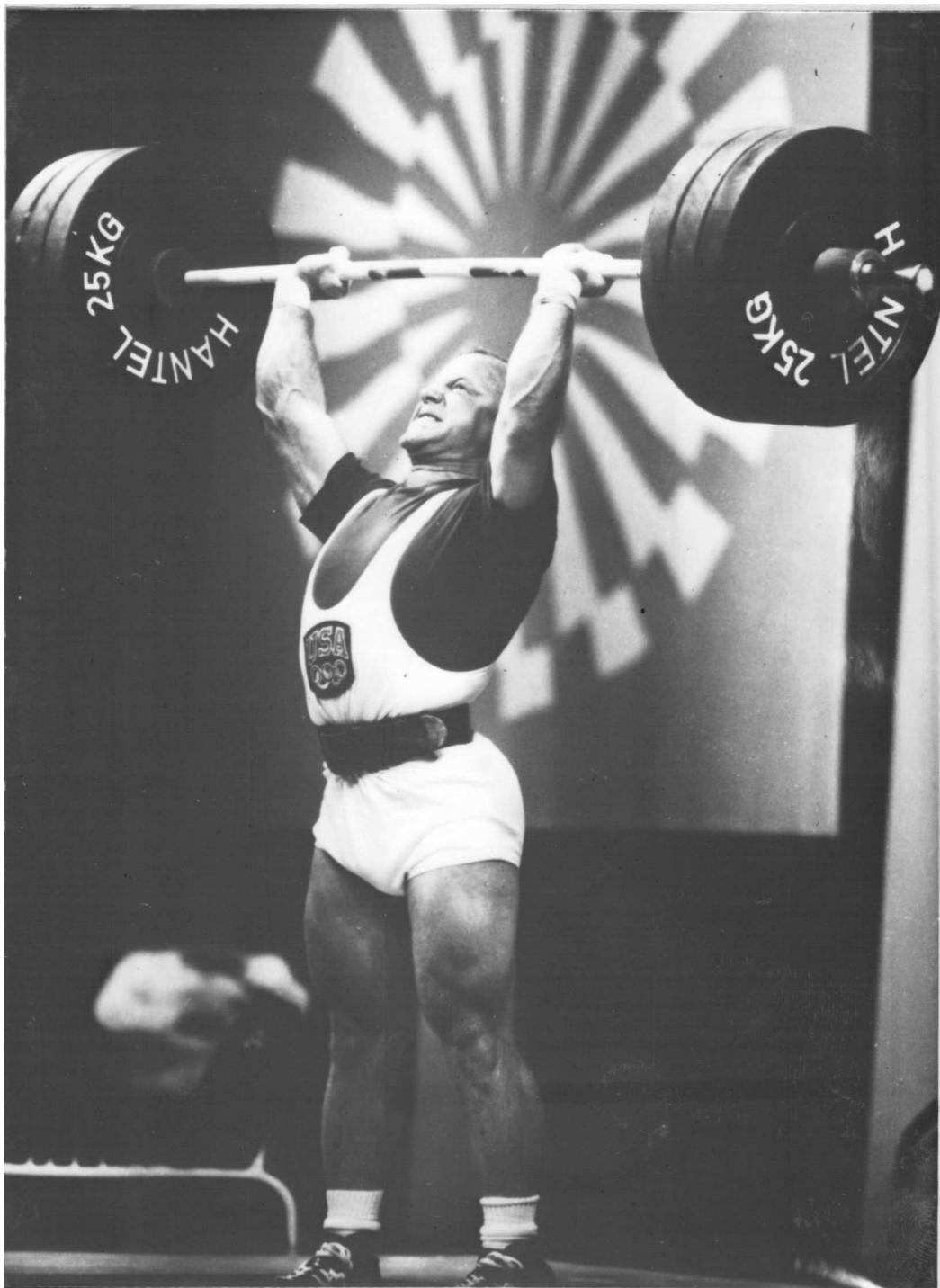
I did a lot of things; I didn't just leave it to hypnosis. Like I would play the national anthem the last months before a major meet, and have everybody yell and scream every time I approached a weight close to the world record. And then at night, I'd primarily do the hypnosis.

There is much to praise about Russ Knipp's mental training regimen. Observe that he practiced self-hypnosis *every day* two months in advance of a major competition. Mental training, just like physical training, should be *regularly* practiced to ensure that it provides maximum benefits. Knipp adopted this approach of regular practice of self-hypnosis, and since he retired from competition in 1972 no other U.S. weight lifter has matched his accomplishments.

Note also that the self-hypnosis Knipp practiced seems to have included elements of visualization. After giving himself "hypnotic suggestions mainly on concentration," he then thought of the lifts he would make during competition, how he "would approach the bar," etc. This shows that one does not have to conduct separate mental training sessions in order to practice self-hypnosis and visualization; both disciplines can be easily blended, and turned to interchangeably, during a mental preparation session. Knipp's use of visualization while in the hypnotic state demonstrates again how similar the two mental rehearsal techniques are. Both disciplines can be performed with or without one achieving a state of relaxation, though self-hypnosis and visualization usually generate their best results when one practices them in a relaxed condition. Knipp opted to attain a state of relaxation when he engaged in self-hypnosis and visualization. And, by practicing both disciplines he provided himself *insurance*; two mental rehearsal techniques would have to fail for him to not be properly mentally prepared for competition—an unlikely event because Knipp practiced the self-hypnosis and visualization every day for two months before major championships.

Russ Knipp's mental training regimen possessed another attractive feature. Knipp practiced self-hypnosis at night just before he went to sleep. As we recall, this is what Billie Jean King did (see Tennis chapter). We also recollect Jimmy Grippo using hypnosis on Muhammad Ali at this time of night, too (see Boxing chapter). To repeat a most important point, Grippo's theory is that hypnotic suggestions are doubly effective right before you go to sleep because "they're accepted by both the athlete's conscious and subconscious mind." Several Soviet scientists, in fact, have conducted studies in this area, the results of which lend credibility to what Grippo contends. These scientists studied sleep-learning (hypnopedia), and concluded that it can dramatically help those people possessing a high degree of suggestibility.[1]

I wish to highlight as well Russ Knipp's remark that he "concentrated on one focal point" whenever he hypnotized himself. Such concentration is quite helpful—some experts say necessary—for one to attain the hypnotic state. For example, Dr. William J. Bryan, in his *Legal Aspects of Hypnosis*, states this:



Using principles of self-hypnosis, Russ Knipp lifted a world record of 369 pounds in the press during the 1972 Munich Olympics. Here is that record lift.

Every hypnosis induction contains two things regardless of how you induce a person. One, a central focus of attention; two, surrounding areas of inhibition in the cerebral cortex. If those two things are present, the person may enter the hypnotic trance.

Knipp's central focus of attention was his midsection. He concentrated on it, claiming that "the power of your strength comes from the midsection." Interestingly, this contention of Knipp's is in direct agreement with what practitioners of the martial arts maintain (see the discussion of *chi* and the *tan tien* in the Amateur Athletes chapter).

When I talked to Knipp, I wanted to obtain his opinion of a comment made by Dr. Warren R. Johnson, who stated in his paper, "Hypnosis and Muscular Endurance," the following:

My experience has led me to suspect that hypnotic suggestions are more likely to improve the strength performance of nonathletes than of athletes; and conversely, that hypnotic suggestions are more likely to improve the endurance performance of athletes than nonathletes.[2]

A champion weight lifter who regularly practiced self-hypnosis for years, such as Russ Knipp, should be qualified to discuss this question. So, I asked Knipp what he thought of Dr. Johnson's opinion. The thrust of the answer he gave me is that even if hypnosis provides only small improvements in an athlete's strength and endurance, that can prove sufficient to make the difference between victory and defeat. Explained Knipp:

Lifting is probably fifteen to twenty percent endurance. I know guys that are physical wrecks in endurance or stamina, but can lift phenomenal tonnages. They couldn't run down the street if they had to.

But, here's the thing. In any sport, if you take a highly-conditioned athlete, to make him improve just five percent or three percent is a drastic improvement. But, take a beginner who doesn't know how to do anything right. He could throw a shot, for example; now, you hypnotize him and have him throw a shot again. Under that psych he can do amazing things. But, an experienced athlete is working more towards his potential. To get an extra four inches on a top shotputter, you're talking a lot. Because that's the equivalent to maybe ten inches for a beginner.

Coincidentally enough, Knipp once hypnotized a beginner weight lifter. Although a beginner, he was not a nonathlete. However, just as Dr. Johnson speculated about nonathletes, the beginner's strength performance improved dramatically. Knipp tells what happened:

I saw thirty pounds lifted above what a lifter ever lifted before. He was again just a beginner. I worked with this young lifter for about three weeks, just doing different things: autosuggestions and power suggestions. In one workout, I hypnotized him. It was late at night, nobody else around. I had him go out, and the kid broke thirty pounds over his best in the clean. This occurred in Pittsburgh about two years after I graduated from high school.

Another weight lifter, Marshall Morris, used self-hypnosis to substantially improve his strength performance. Morris learned self-hypnosis from me in 1978, and employed it regularly afterwards for competitions. In January, 1980 he set a National Junior weightlifting record for the snatch in the 165-pound class, lifting 130.5 kilos (288 pounds); Morris was 19 years old when he set this record. A disastrous performance at a weightlifting competition had prompted him to come to me for help. Recalled Morris, "I had just bombed in the snatch in a Junior Olympic meet, lifting only 90 kilos (198 pounds). I came over to your [the author's] house, learned self-hypnosis, and went to the Fullerton College weight room. There I snatched 110 kilos (242 pounds). So, that just shows you how much your mind controls everything."

Morris used self-hypnosis in a different way from Russ Knipp; he preferred a conditioned-response and visualization approach:

I really get into a good hypnotic state when I'm warming up with light weights (30 to 40 percent of my max). I try to feel my whole body while warming up. I also try to get my hand-eye coordination down, since Olympic lifting is so technical. I think about keeping my body tight, extending, and jumping up with the weight. But, you can't really think about all that stuff, especially when the weight gets heavier; that's why I try to feel my whole body while warming up with the light weights, so that my motor-nerve pattern knows what to do.

To enter the hypnotic state, said Morris, "I don't have to lie down." Instead, he developed the instant self-hypnosis capability, and put it to use while warming up. Morris also found no place for relaxation in his self-hypnosis regimen. "If I relax my mind," he noted, "I'll relax my body—and that's what I *don't* want. I stay pretty well tensed up, because you have to think about attacking the bar, not be afraid of it."

Morris captured the 165-pound class championship in the U.S. National Junior Olympics competition in July, 1979; in fact, he outlifted the winners of the 181-lb., 198-lb., 220-lb., and 242-lb. classes. Hard physical training and proper mental training paid off for him. His positive experience with self-hypnosis while competing as a junior led him to recommend the technique to other junior athletes. Observed Morris, "I think it's good for junior athletes to use self-hypnosis early, so that by the time they are older, it will be a natural thing. For example, I see a lot of junior lifters go into the weight room with their radios playing; they socialize half the time, instead of really training. You can't go into the weight room with your mind off somewhere else."

Yet another weightlifting record was broken with the assistance of hypnosis. *Los Angeles Times* writer Pete Thomas reported that Fred Hatfield, editor of *Sports Fitness* magazine, was helped by hypnotist Peter Siegel in setting "the world power-lifting squat record at 1,008 pounds, more than four times his (Hatfield's) body weight."^[3] Remarked Hatfield, "That's a pretty intimidating weight for anybody. There is no doubt in my mind it (the successful lift) came from Peter's therapy. Peter has a unique talent which goes far beyond that of sports psychology."

Siegel, whose relationship with New York Mets pitcher Sid Fernandez we noted in the Baseball chapter, discussed with Thomas the purpose of the hypnosis sessions he holds with his athlete-clients:

To shake up the mind in order to dislodge that mental block holding an athlete back. I help them mobilize the seed of their power. I help them get to the essential point of their ability to express peak athletic performance, and help them become regulators of that ability.

I make sure the power of the mind works in conjunction with the power of the body. Thought is to the mind what food is to the body.

Terry McCormick, former U.S. and world powerlifting champion, also has testified to the value of hypnosis, and, in more ways than one, is a "strong advocate" of the technique. He was asked by *Orange County Register* sports columnist Cliff Coan this question: "Did you do anything differently or acquire any special knowledge that enabled you to become a world champion?" Replied McCormick:

Two things proved to be invaluable, both in my training and in competition. Having a complete knowledge of bio-mechanics was one... The other was hypnosis, including self-hypnosis and hypnosis with the help of a psychotherapist. This was a field that I helped pioneer in this sport.

Once I was certain that I was in peak condition for competing, I then conditioned myself mentally that I would accomplish each lift successfully.

By using hypnosis, it was possible to feed positive facts to my subconscious mind. Positive in, positive out. Seeing the hundreds of pounds of iron in front of you, that you are going to attempt to lift, can be awfully intimidating if you are not mentally prepared. In your mind, you have to be completely convinced that you will successfully lift all that iron, or your chance of being successful is practically nil.[4]

McCormick then offered advice for those just starting out in powerlifting, two suggestions being “develop the ability of complete concentration,” and “check your attitude as you walk into a gym and make sure it is positive;” mastery and regular practice of self-hypnosis would seem to fill the bill in this case, as it has with many champion lifters.

Not surprisingly, some individuals involved in the world of weightlifting have experimented with other mental training strategies besides hypnosis and visualization. In 1983, for example, Michael Mahoney of Penn State University tried out some simulation techniques on top American weight lifters—athletes considered good bets to make the U.S. Olympic team. This took place at a training camp, with Mahoney devising in one instance a simulation of competitive conditions the lifters might encounter in the Olympics. The athletes were subjected to all sorts of distractions while attempting their lifts—camera flashbulbs popping, spectators cursing them, etc. The aim of all this, as *L. A. Times* reporter Beth Ann Krier related, was “to teach the weight lifters to remain calm and focused on the task immediately before them—despite distractions of any sort.”[5] Whether Mahoney succeeded in his efforts we gain no clue from Krier. We do know, though, how the U.S. lifters, fared in the ’84 Olympics: they won 1 silver and 1 bronze medal out of 10 separate weightlifting events (30 total medals awarded). However, if the Bulgarian, East German and Soviet weight lifters had competed (the Soviet Union and most Eastern European nations boycotted the ’84 Olympics), it is doubtful that any U.S. weight lifter would have won a medal.

Most assuredly, the Soviet weight lifters, had they participated in the ’84 Olympics, would have done extremely well. Weightlifting is taken very seriously in the USSR. International class weight lifters there reportedly engage in intense mental training, besides carrying out their grueling physical workouts.[6] Russ Knipp, for example, informs us that “every Russian Olympic athlete takes classes in hypnosis.” It is difficult to determine if this statement holds true for every Soviet Olympic athlete; but, based on a wide range of evidence, very conceivably all Soviet Olympic team weight lifters employ mental rehearsal techniques for training and competition.

Knipp says he talked to the Soviet weight lifters, and they acknowledged that they have classes and sessions in hypnosis:

I've talked to different Russian athletes. They have (hypnosis) sessions. The Bulgarians, for example; they'll have classes, and do different things to make the athletes relax. They use music as one form of concentration; they'll also use total darkness.

Naturally, if the Soviet and Bulgarian weight lifters were to admit to using hypnosis, it makes sense that they would tell a fellow champion athlete such as Russ Knipp, with whom they have a lot in common. I asked Knipp if the Soviet athletes talked freely on the subject to him. He not only answered affirmatively, but provided some eye-opening information about Soviet champion David Rigert, who set 64 world records during his career and was considered at the time the world's best weight lifter, pound for pound:

Oh sure. For example, Rigert spoke. He said he was a very good subject in hypnosis, and had a very high belief factor. Rigert said he personally could not believe he could train as hard as he did and lift those kind of weights in training. He said a transition took place in his life from 1970 to 1971, and it was hypnosis that brought him into

a new realm of lifting. His workload doubled. He was working out so hard, he just didn't know how his body would stand up under the strain. Rigert said it was hypnosis that helped him.

If you ever witnessed David Rigert compete, you might have observed that he appeared to be using self-hypnosis. What he did before attempting the lift was to: 1) totally relax his body, 2) close his eyes while tilting his head back, and 3) take deep breaths. This is the procedure Rigert followed during the 2nd Annual International Record Makers competition held in Las Vegas in August, 1978. It is likely Rigert gave himself reinforcing suggestions right before attempting the lift; or, during this time he might have been visualizing the lift, mentally seeing himself employing proper form in hoisting the weight. Whatever the case, Rigert broke two more world records during the Las Vegas competition. Over a 10-year span he destroyed the record books in the middleheavyweight class, the class in which he was the 1976 Olympic champion. For the Las Vegas meet Rigert moved up to the heavier 220-pound division. Lifting a total of 870 3/4 pounds he set new records in this division, too! Such feats hardly seem possible; and, as Knipp relates, even Rigert "could not believe he could train as hard as he did and lift those kind of weights in training." But, "it was hypnosis that brought him into a new realm of lifting."

Rigert trained as hard mentally as he did physically. This is evidenced by the response *Los Angeles Times* writer Bill Shirley received when he asked the Soviet champion why weight lifters stare so long as the bar before attempting to lift it:

. . . Rigert cited the immense concentration required in the sport. Once in practice, he said, he stood in shirt and trousers and focused on the weight for seven minutes and began sweating so much that his shirt stuck to his body. He said he often sweated off weight just concentrating in practice.[7]

We can justifiably conclude that one Soviet Olympic weight lifter, David Rigert, used hypnosis. Rigert's last-minute concentration procedure, his comments to Knipp and Shirley, and his incredible records point in this direction. Other top Soviet weight lifters no doubt practice this discipline as well. Shirley, for instance, reports in a September 7, 1983 *L. A. Times* article that super-heavyweight Anatoly Pisarenko, who in 1983 held the world record in the snatch and clean and jerk (total of 1014 pounds), "goes into deep trance-like concentration before attempting a competitive lift." [8] An intriguing picture of Pisarenko, showing him staring *a la* Rasputin, accompanies Shirley's remark in the *Times* article.

That Soviet Olympic weight lifters use hypnosis and visualization can also be inferred from the comments made by Professor Alexi Medvedev, the former world weightlifting champion in the heavyweight class, who now trains weightlifting coaches at the Central Institute of Physical Culture in Moscow. He says that "our coaches must be psychologists. . . The lifter must psychologically concentrate on his job. He must concentrate his emotions, feelings and faculties so he will not be distracted." [9] Mental rehearsal techniques, taught to the weight lifter by the coach, would help bring about this required concentration. Medvedev probably instructs weightlifting coaches in the proper usage and teaching of such techniques, given his strong belief that "our (Soviet weightlifting) coaches must be psychologists" and also given his own outstanding career. Having won the world championship in 1958, quite possibly Medvedev was introduced to hypnosis at some point along the way.

Charles A. Garfield, author of *Peak Performance: Mental Training Techniques of the World's Greatest Athletes* (1984), extensively studied the Soviet and East German sports training programs. He found that mental training was widely taught, especially to athletes at the international class level. Garfield states in his book the following:

In Soviet athletic training programs, two key skills must always be mastered. The first is the skill of voluntary relaxation—that is, the ability to relax the body

consciously and put the mind in a quiet receptive state. The second skill is the ability to produce and creatively manipulate mental images. This is the process frequently referred to as "visualization." [10]

Garfield is himself a former weight lifter. In 1976 he met Soviet sports psychologists at a scientific conference in Milan, Italy. The Soviet scientists demonstrated to him how mental training can greatly elevate athletic performance. Using Garfield as the subject in an improvised experiment, they assigned him the task of bench-pressing 300 pounds. Garfield had not worked out for months, and when he had done so, he rarely benched more than 280 pounds. So, it was only by generating a huge effort that he succeeded in lifting the 300 pounds. The Soviets then told Garfield that they wanted him to attempt to bench-press 365 pounds, which was his personal record set eight years previous. Garfield informed them that it would take him 9-12 months of serious training to get in condition to lift 365 pounds again. The scientists thought otherwise. After taking various physical measurements of Garfield—body fat percentage, small blood sample analysis, metabolic rate, etc.—they had him perform a mental rehearsal technique:

They asked me to lie on my back and proceeded to guide me into a deep state of relaxation. I was fully awake and alert, aware of everything going on around me. Yet every muscle in my body relaxed, and I felt more at ease than ever before in my life. They asked me to imagine my arms and legs becoming increasingly heavy and warm. A warm, tingling sensation spread over me.

... I was told to mentally visualize myself approaching the bar, sitting on the bench, lying down, and then, with total confidence, lifting the 365 pounds. I was also instructed to imagine the sounds I would hear, the dull metallic ring as the bar tipped slightly, jangling the weights together, the sound of my own breathing, and any vocalizing I ordinarily did when working out. [11]

This relaxation and visualization process lasted approximately 45 minutes whereupon Garfield proceeded, much to his surprise, to successfully bench-press the 365 pounds. The Soviet scientists informed him afterwards in a matter-of-fact way that they had calculated he could lift between 345 and 395 pounds. The visualization procedure merely brought to the surface Garfield's latent physical capabilities.

Garfield presents in his book a comprehensive mental training program for athletes—the program being a synthesis of what Soviet and East German sports psychologists have their top athletes follow. He says that the program will yield "dramatic changes... in two or three months" with continued practice. Yet, Garfield's own bench-pressing experience, under the guidance of the Soviet scientists, clearly shows that adoption of mental rehearsal techniques can, in many cases, bring about major improvement *immediately* (recall how Marshall Morris, after learning and then using self-hypnosis, improved his snatch from 198 pounds to 242 pounds—all this occurring in the same day). While athletes should not raise their expectations too high about the benefits mental training will provide them, still they should recognize and seek out the potential rewards one can experience from regularly practicing such mental disciplines as visualization and self-hypnosis.

Soviet sports psychologists have investigated how various forms of mental training affect weight lifters' performance. Some of their investigations are especially worthy of mention.

In a superb experiment V. S. Kopisov and A. D. Nagorniy studied the effects of electrosleep on top weight lifters. To appreciate this study, which was published in the December, 1983 issue of *Soviet Sports Review*, we need to understand exactly what electrosleep is. Kopisov and Nagorniy define it this way:

Electrosleep is a method of neurotrophic therapy which is based on the effect of im-

pulse currents on the brain. They allow for development of a state which is comparable to that of usual sleep but one which also has a therapeutic effect.

The key to therapeutic electrosleep is in its quieting or stimulating influence, depending upon the initial state of the body. These influences allow for recuperation of disturbances in the neurovascular, neurohumoral, neuroendocrine and other functional systems.[12]

To perform electrosleep one needs to use a special apparatus. In their experiment Kopisov and Nagorniy said that “electrosleep was carried out with the ES-3 and ES-4 devices.” It might be difficult or inconvenient to obtain such a device; yet, as we shall see, the effort may prove very worthwhile. The two Soviet researchers studied 40 Master of Sport weight lifters, dividing them into two groups—one group using electrosleep, the other group serving as the control. The two groups performed identical training loads. “The load volume,” Kopisov and Nagorniy reported, “was 1400 lifts with a relative intensity of 78.3%. The duration of the study was four weeks.” In the electrosleep group, “every athlete had 14 electrosleep sessions which lasted 30-40 minutes each. Electrosleep frequency was 100-150 hz.” (Current strength was 3-8mA.) The electrosleep sessions were undertaken either after lunch (2-4 P.M.), after dinner (7-10 P.M.), or immediately before night sleep. Electrosleep sessions were also held *during* competition; this took place during the break between the snatch and clean and jerk.

The results of the study speak quite favorably for the use of electrosleep. During the training period the electrosleep group made 12.3% more successful lifts involving maximum weight than the control group. Heart rate, anxiety level, and electroskin resistance of the lifters employing electrosleep also normalized much faster than the controls. In competition those weight lifters using electrosleep outperformed the other lifters by 16.5% in number of successful attempts. Kopisov and Nagorniy noted that “visual observation of the weight lifters’ conduct revealed that those who used electrosleep showed more self-discipline in their actions.” The two researchers summed up their findings this way:

Electrosleep significantly speeds up the process of optimizing the emotional state of weightlifters after intense training sessions. Use of electrosleep sessions increases the effectiveness of preparation and success in competition.[13]

Electrosleep seems to possess an advantage not found in most other mental training approaches. The athlete is hooked up to a machine, and he is awakened by an associate after a while. That appears to be all that is involved. The electrosleep device, being merely a machine with a single function, can hardly constitute a psychological threat to the athlete. By contrast, visualization, hypnosis, and similar mental techniques often entail an outsider who teaches and administers the discipline to the athlete; and frequently this outsider is assigned to work with the athlete on an on-going basis. Because an outsider is involved, the athlete has to develop trust in that person. He has to overcome many psychological apprehensions, such as: the fear that the outsider might be attempting some sort of “mind control;” the thought that maybe the person is using the athlete to make a name for himself, etc. In short, a clashing of egos can occur between an athlete and a “mental coach.” No such clash can happen between the athlete and the electrosleep device, though the athlete might feel resentment towards his coach if the coach ordered him to use electrosleep.

The electrosleep machine’s disadvantage is that it first has to be obtained, then maintained, and finally manned while in use. But, use of the electrosleep device is certainly much more cost-effective than hiring a sports psychologist to work with the athletes. Fellow athletes or the coach can no doubt easily man the electrosleep machine, turning it off and waking up the athlete at the appropriate time. The device would likely be “on call” more often than a team psychologist (who could be out of town, ill, etc.). Given electrosleep’s unique advantages and the performance bene-

fits it confers, one hopes that more athletes will have occasion to try out the method. (Colleges and professional sports teams can easily afford the cost of an electrosleep device. It is simply a matter of the people in charge of the athletic program budget recognizing the machine's usefulness.)

A. A. Seimuk, Z. S. Arkhangorodsky, and U. K. Zaitsev trained advanced weight lifters in the use of autogenic training and autosuggestion. The scientists wanted to see how these mental disciplines, when used together, affected the athletes' heart rate, arterial pressure, and other physical measurements, as well as the athletes' psychological state (as determined by a 56-question test measuring self-feeling, activeness, and mood). The problem cited by Seimuk *et al*, in justifying their 1982 study, is that "increased volume and intensity, together with insufficient use of restorative measures in contemporary training of weightlifters, eventually leads to body fatigue." [13] Such fatigue results in poorer performances, i.e., less weight successfully lifted. It was hoped that the autogenic training and autosuggestion would prove to be a beneficial "restorative measure," meaning the lifter's heart rate, etc. would return to normal much sooner than usual after a training session.

The scientists took fourteen advanced Soviet weight lifters, ranging in ability from Candidates for Master of Sport to Masters of Sport, International Class, and had them mentally train 2-3 times daily using the following method:

1. An introductory portion to prepare the athlete for the forthcoming rest and for calming down;
2. Relaxation to achieve a feeling of warmth and relaxation in the muscles of the arms, legs, pelvic area, spine, abdomen, chest, neck and face;
3. Regulation of breathing and heart-circulatory activity;
4. Development of a feeling of confidence, satisfaction and a positive attitude toward heavy loads;
5. Preparation for and creation of a mental state for execution of the planned work; and
6. Activization.[14]

Steps 2 and 3 represent the *autogenic training* portion of the method, with autogenic training being simply defined as progressive relaxation. Steps 4, 5, and 6 constitute the *autosuggestion* portion—autosuggestion, or self-suggestion, being directives, commands or impressions one gives himself (usually done mentally and after one has attained a state of relaxation).

This six-step method was performed for 17-21 minutes after each weight training session, and it was adjusted to suit each athlete's particular circumstances. "Taken into consideration," remark Seimuk *et al*, "was the individual state of the athlete. Main attention was given to those muscles which were used the most in execution of the exercises performed during (weight) training." The fourteen lifters apparently served as both the experimental group and control group. This was accomplished by having the group go through two four-week cycles. "One training cycle," the scientists report, "was carried out without the use of autogenic training. The study took place during preparation for the two most important meets of the year. Both groups had practically identical load volumes and the level of trainedness of the lifters in both of the preparatory training periods was approximately the same."

Seimuk *et al* discovered that the autogenic training significantly improved the psychological state of the lifters, as expressed by higher scores on the self-feeling, activeness, and mood test. Also, measurements of the lifters' heart rate (HR), arterial pressure, etc. showed that physical "restoration" occurred much faster when autogenic training (AT) was used. For example, the sci-

entists stated that "in usual restoration (after 25 minutes) the indices measured do not return to the initial level;" but, "it can be seen that HR of athletes who used AT returns to the initial level at the 25th minute of restoration. Without use of AT, HR is 12 beats/min. higher than the initial level at this time."

A weight lifter who psychologically feels better and who physically recovers faster from a workout will probably show improvement in his lifting performance over what he had been doing previously. This is exactly what Seimuk *et al* observed. "It should also be noted," they point out, "that execution of training loads with the use of autogenic training was 11% higher than without its use."

This, of course, is the most significant finding of the scientists' study, at least as far as most coaches and athletes are concerned, whose main interests rest in bottom line issues. In this case the autogenic training and autosuggestion clearly led to improved performance; and improved performance normally translates into more victories. Obviously, if one were interested in improving his weightlifting performance, the mental training method devised by Seimuk *et al* should certainly be considered for adoption. As the Soviet scientists contend, "Modified use of autogenic training shows that it can be used favorably in the contemporary training process of weightlifters."

Mastery of autogenic training, combined with use of hypnosis, was found by four other Soviet scientists to greatly improve weightlifting performance. Z. S. Arkhangorodsky, A. D. Konavalov, G. G. Kolesnichenko, and V. I. Omelyanenko determined in a 1981 experiment that "in cases where autogenic training was well mastered, for correction of technique errors in the snatch and clean and jerk, eight to twelve suggestive seances [hypnosis sessions] were sufficient." [15] By comparison, the control group of weight lifters, who were not exposed to any autogenic training or hypnosis, took 2-3 months or longer to correct similar errors in technique.

Arkhangorodsky *et al* provided details of one instance where autogenic training and hypnosis helped a weight lifter:

Class 1 athlete, Y, 19 years old, mastered autogenic training very well. In lifting the weight to the chest (clean) at the moment of the top pull there was premature contraction of the trapezius muscles and a moment of stopping in leg extension. After this, the thigh quickly comes very close to the barbell, as a result of which, the bar receives acceleration forward and not upward. After this, the barbell was brought up on the chest. After 8 sessions of working with the psychologist according to the (suggestive) method these errors were completely removed. [16]

Though the identity of the subject (Y, the Class 1 athlete) is withheld, as is the protocol followed in scientific papers, we can reasonably conclude that the story is accurate. It is simply a case of autogenic training and hypnosis, having been successfully used by other Soviet weight lifters and athletes, working again. The experimental conditions differed a little from those found in other studies, but the results were practically the same. Not surprisingly, the conclusion reached by Arkhangorodsky *et al* is virtually identical to that arrived at by Seimuk *et al*. The four scientists remark:

The suggestive method in combination with autogenic training is recommended as an effective means of correcting errors in technical execution of the clean and jerk and snatch.

A study by P. M. Kasyanik demonstrating the value of "ideomotor tuning," meaning visualization, for weight lifters should be briefly mentioned. Three groups of lifters attempted to pull a set amount of weight. One group was instructed beforehand to "reproduce the effort in your mind several times" before making the attempt. This group outperformed the other groups in the task, leading Kasyanik to conclude that "ideomotor tuning is an effective means of direct mental prepa-

ration for weightlifting competition... Observations of lifters who mastered the skills of ideomotor tuning showed that they were able to perform more confidently, make more successful lifts, and significantly improve their performances.”[17]

We have witnessed in this chapter many examples of weight lifters dramatically improving their performance by utilizing such mental training strategies as self-hypnosis, visualization, and electrosleep. One can employ most of these disciplines without having to rely on the “expertise” and “assistance” of an outsider (coach, sports psychologist, etc.). To mobilize your strength, you need to mobilize your will. Emulate the practice of David Rigert and Russ Knipp. Set aside a few minutes every day to practice the mental rehearsal technique of your choice, and soon you should realize noticeable improvements in your training session workloads and competitive performances.

FOOTNOTES

1. These studies are reported by J. Hoskovec in his paper, “Hypnosis in the Soviet Union: a critical review of recent and major experiments,” published in the *International Journal of Clinical and Experimental Hypnosis*, Vol. 14, 1966.
2. Warren R. Johnson, “Hypnosis and Muscular Performance,” *Contemporary Readings in Sport Psychology*, ed. William P. Morgan, (Springfield, Illinois: Charles C. Thomas, 1970), pp. 410-423.
3. Pete Thomas, “Thinking Positive,” *Los Angeles Times*, July 26, 1986, Part III, p. 16.
4. Cliff Coan, “Train All Body Parts When Not Competing,” *Orange County Register*, July 2, 1987, p. D13.
5. Beth Ann Krier, “Olympians Exercising in Mind Arena,” *Los Angeles Times*, June 7, 1983, Part I, p. 1.
6. In 1974 R. A. Roman reported Soviet weightlifting specialists as considering “the optimal training load to be a monthly average of 1000 lifts in the preparatory period and 750 lifts in the competitive period. For an athlete with an average training weight of 106 kg. (233 pounds) the total tonnage in the first instance is 106 tons and about 80 tons in the second” (see “The Training of Bulgarian Weightlifters,” *Soviet Sports Review*, Vol. 9, No. 4, December, 1974). The training load is probably greater now. Kopisov and Nagorniy relate in their study of electrosleep’s effects on weightlifting performance that the athletes made 1400 lifts in a month (this study is described in detail later in this chapter).
7. Bill Shirley, “The Strongest Man in the World,” *Los Angeles Times*, September 7, 1983, Part III, p. 6.
8. Ibid.
9. Ibid.
10. Charles A. Garfield, *Peak Performance: Mental Training Techniques of the World’s Greatest Athletes*, (Los Angeles: Jeremy P. Tarcher, Inc., 1984), p. 89.
11. Ibid, pp. 18-19.
12. V. S. Kopisov and A. D. Nagorniy, “The Use of Electrosleep in the Training of Qualified Weightlifters,” *Soviet Sports Review*, Vol. 18, No. 4, December, 1983, pp. 192-194.
13. A. A. Seimuk, Z. S. Arkhangorodsky, and U. K. Zaitsev, “Autogenic Training for High Level Weightlifters when Using Heavy Training Loads,” *Soviet Sports Review*, Vol. 18, No. 4, December, 1983, pp. 161-163.
14. Ibid.
15. Z. S. Arkhangorodsky, A. D. Konavalov, G. G. Kolesnichenko, and V. I. Omelyanenko, “Suggestive Methods in Weightlifting,” *Soviet Sports Review*, Vol. 17, No. 1, March, 1982, p. 22.
16. Ibid.
17. P. M. Kasyanik, “Psychological Aspects of Weightlifting Competition,” *Soviet Sports Review*, Vol. 15, No. 1, March, 1980, pp. 31-33.

MENTAL TRAINING STRATEGIES TIME LINES (AMATEUR ATHLETES)

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Hypnosis Sessions

(See Arthur Ellen's work with the Univ. of Houston basketball team; James DeMile)

Self-hypnosis Sessions

(Woodrow Auge; students of kung fu instructor James DeMile followed a 6-step procedure)

Visualization Sessions

(Colorado State University ski team won their league while applying this mental technique; Vince Brookins; Fowler and Smith; Glenn Yothers did some at night while going to bed, and others before racquetball matches)

Harnessing *Chi*, Reaching Zen

(David Taylor; Robert Stewart; Eugen Herrigel)

Visualization Sessions

(Leonhard Stock mentally practiced his downhill ski race the night before he won his gold medal)

Hypnosis Sessions

(See Dr. Grimm's work with Dave Mills)

Imagery Sessions

(Tim Caldwell; Lyle Nelson; Nordic skier Bill Koch did a last-minute session at the starting gate before winning the silver medal; Bill Griffith mastered "Triple Imagery," employing it during canoe races; Barbara Lynch)

Autosuggestions

(Skater David Santee would give himself these as he took the ice; John Alcala; the author)

AMATEUR ATHLETES: “FREE” MENTAL REHEARSAL TECHNIQUES LEAD TO SELF-IMPROVEMENT

Visualization, self-hypnosis, and related mental disciplines are no strangers to the world of amateur athletics. Virtually every amateur sport contains examples of athletes who have regularly practiced some mental rehearsal procedure. Not coincidentally, these athletes have often gone on to score spectacular triumphs. Most of us are amateur athletes, and though we are not as good as the pros, we can at least perform up to our potential. Proper mental attitudes can assure that we do just that.

The various amateur athletes whose stories we'll soon read have demonstrated that mental rehearsal training can substantially improve athletic performance. Furthermore, most mental preparation procedures cost nothing to learn, and “free” is certainly well within the budget of every amateur athlete. It takes but five minutes to learn the basic techniques—longer, if you want to become a perfectly competent practitioner. Anyone can make this minimal investment of time. Be sporting, and try to learn self-hypnosis, visualization, or any of the other mental disciplines; if one works for you, you are in business (if not, you have not lost anything).

Shortly before the 1980 Winter Olympics, Austrian downhill skier Leonhard Stock figured he had nothing to lose by trying visualization. During a training run two months prior to the Olympics, Stock had seriously injured his shoulder (a cast was required). As a result, he was not chosen as a member of the four-man Austrian downhill Olympic squad. Stock, however, was absolutely determined to ski in the Olympics. He arrived at Lake Placid with his teammates, and proceeded to turn in the fastest qualifying times on the practice runs. Having dramatically shown that he had overcome his injury, the Austrian downhill ski coaches changed their minds; they placed Stock on the team, bumping off another member. Dr. Eugene Gauron, in his book *Mental Training for Peak Performance*, describes what happened next:

The night before the event, he [Stock] lay in his room and completely relaxed his body. In his mind he went over the course and skied it again and again to the point where he knew every contour of the hill and exactly how he wanted to attack the course. When satisfied that he was ready, he closed his eyes and went to sleep thinking, “The race is definitely going to be mine.”

The following day, the USA coach observed Stock warming up and was heard to comment, “He looks very confident. I do not think that anyone will beat him.” It turned out that the coach was right, for Stock won the gold medal.

Stock's winning time was 1:45.50, an impressive .62 second faster than the silver medalist, teammate Peter Wirnsberger. In his comments to the press, Stock accounted for his remarkable comeback and victory this way:

I am a fighter. I had to fight two years ago to get a chance to ski downhill. I had to fight back after the accident. And I had to fight to make the downhill team here.[1]

Stock did not say whether he employed visualization for the practice runs, the results of which were instrumental in his finally being selected to the Austrian downhill team. But, the odds are that Stock used visualization in this instance, too. Having overcome long odds to make the team, it is doubtful that he would suddenly introduce a new element into his mental preparation routine for the all-important Olympic race. One, after all, does not tinker with success.

Perhaps surprisingly to some, much work has been done in the area of applying visualization to skiing. For example, *The Hidden Skier* (1977) by Corky Fowler and Christopher Smith contains many visualization exercises for skiers to try. Fowler and Smith believe so much in the power of visualization that they recommend skiers practice this mental discipline during the off-season. Says Fowler:

I've been mentally practicing my skiing during the summers for years. On the first day of each ski season, I ski as well as I did on the last day of the past season. Before I began mentally skiing, it would usually take me several days to be able to ski as well as I had the year before.[2]

Naturally, Fowler and Smith recommend that skiers practice visualization during the season, especially when they are at their favorite resort. *The Hidden Skier* authors specifically advise the following:

Take a moment, while you are waiting for the bus or riding a chairlift, and choose an aspect of your skiing that needs improvement, your pole plants for example. Now imagine a good skier using his poles. When you visualize that clearly, imagine yourself skiing, using poles in the same manner as the good skier you just pictured.

Take three or four minutes each day and imagine yourself skiing an entire run using this new movement.[3]

The recommendation to visualize when riding the chairlift is particularly good. With chairlift prices seemingly going up as high as the mountain top nowadays, one might as well get his money's worth. Fowler and Smith's suggestion to "take three or four minutes each day and imagine yourself skiing an entire run" can easily be carried out in the time one spends on the chairlift. Practicing visualization while riding the chairlift therefore makes sense and rates as a highly efficient use of one's time.

In their book Fowler and Smith present large illustrations of various properly executed ski positions and turns, such as: traverse (basic stance in skiing), snowplow, wide-track turn, step turn, etc. What the authors attempt to get the reader to accomplish is to bring the illustrations to life, this transformation occurring in the reader's mind. Here is the procedure they propose:

Pick one of the sequences that you would like to incorporate into your skiing. Look at it. Do not try to figure it out or understand "how to do it." Just observe what is going on with the various figures on the page. Look at the track left by the skis. Look at the hands and posture of the figures in each part of the sequence you've chosen. Become totally familiar with all that is there in the sequence.

Now, imagine the sequence coming alive, moving. Close your eyes, if that will help, and watch the figure move down the page. Imagine it in full color if you like. Let the sequence come to life.

Next, imagine that the skier in the sequence is you. Picture yourself doing the movement. Allow yourself to become really confident. See yourself doing the movement from beginning to end.

Pick up the book again a day later and repeat the entire exercise.[4]

If the reader succeeds so far in his efforts, Fowler and Smith tell him to wait a few days, and then imagine the entire movement *without* looking at the book. If successful now in recreating the scene, the authors proclaim that "you're ready for the snow." This proclamation, though, implies that one is *not* ready for the snow if he cannot visualize as proficiently as the authors desire. I believe most skiers would take issue with Fowler and Smith on this, and would not cancel or postpone their long-awaited ski vacation just because they have not met the authors' visualization

standards. Remember, Fowler and Smith have already advised one to visualize while “waiting for the bus or riding a chairlift;” so, the skier still has plenty of opportunity to work on his mental training while at the resort. Also, skiing, like other sports, is comprised of physical conditioning and technical elements. One needs to work on these, too. Therefore less than 100% mastery of one element—whether it be physical, technical, or mental—should not constitute grounds for discouraging the participant from practicing the other elements of his sport.

Mentally bringing to life a book’s illustrations is reminiscent of basketball great Bill Russell’s “mental camera” visualization technique (see Professional Athletes chapter). Russell replayed games in his mind, stating that “the movies I saw in my head seemed to have their own projector.” Developing this ability to self-create mental movies is what *The Hidden Skier* authors are aiming at when they: 1) tell the reader to “imagine the sequence coming alive, moving” (the still picture now becomes a movie) and 2) guide the reader to being able to mentally see himself ski the entire sequence at any time, without relying on the book. Whereas Russell spent hours upon hours practicing visualization, especially when familiarizing himself with the technique at first, Fowler and Smith do not call upon the reader to make such a great sacrifice in time. Despite this difference, both Russell and *The Hidden Skier* authors emphasize developing a “mental camera” for oneself. This can be accomplished, they both indicate, through regular practice.

Leonard Loudis, Charles Lobitz, and Kenneth Singer, authors of *Skiing Out of Your Mind* (1986), a very thorough mental training book for skiers, suggest that you develop your “mental camera” by watching your sports model (i.e., your favorite skier, for example) on television, keeping the sound turned off. They tell you to relax while viewing the performance, and to “experience the whole person, the whole action.” In this case, you are trying to ingrain a moving picture into your subconscious, rather than trying to bring to life in your mind a still picture.

For this procedure to work one’s favorite skier needs to appear on television, but this does not happen too often, unfortunately. The best solution to this problem is to obtain a videotape recorder plus a tape of one’s favorite skier or of a skier known to possess excellent form. Loudis *et al* mention that Pirmin Zurbriggen of Switzerland watched videotapes of his own races to help prepare himself for the 1985 Alpine world championships in Italy. Zurbriggen did this partly out of necessity, because a knee injury suffered 18 days before the championships, for which he immediately underwent arthroscopic surgery, limited his physical training. This misfortune turned into good fortune, though, as the Swiss skier ended up winning both the downhill and combined.^[5] Explaining his victories in the world championships, Zurbriggen stated, “I raced while I was in bed, and that’s why I didn’t lose the feel for it.” As the Swiss ski champion’s experience shows, the suggestion of Loudis *et al* to watch while in a relaxed, receptive state videotapes of one’s sports model merits serious consideration.

More work in the area of training skiers to use visualization has been done by sports psychologist Richard Suinn. Dr. Suinn related his efforts in an excellent article, “Body Thinking: Psychology for Olympic Champs,” appearing in the July, 1976 issue of *Psychology Today*. In this article Dr. Suinn gives the names of most of the athletes he worked with, as well as when he worked with them. By providing this information, Dr. Suinn adds credibility to his stories, and makes it easier for us to verify the accuracy of them, should we feel inclined to do so.

Dr. Suinn conducted an experiment with the Colorado State University ski team in 1972. The team was split up into two equal-ability groups. One group received training in imagery (visualization); the other group acted as the control. The imagery training was divided into three steps:

1. The athletes practiced progressive relaxation. This involved tensing and relaxing muscles for 20 minutes. Two sessions were devoted to this.
2. At the end of the relaxation part, the athletes were told to mentally rehearse their

ski runs. The nice thing about this, as Suinn notes, is that “the imagery rehearsal is subject to conscious control.”

3. The athletes then mentally practiced specific skills, such as racing techniques; also, they went over in their minds the layout of the course and what maneuvers they needed to implement at certain points.

The experiment, according to Dr. Suinn, “worked so well that the research study itself flopped. The team’s head coach, impressed by the improvement in the [imagery] group, raced them but not the skiers from the matched control group.”[6] As a result, Suinn could not demonstrate in a way acceptable to the scientific community that the skiers who used imagery performed better than those who just trained regularly. The sports psychologist, fortunately, did not consider his research study’s ruination a great loss (which it was not). To himself he proved his point, stating:

I can say, however, that the coach was highly impressed, and that the team won the league’s overall trophy as well as the men and women’s trophies. By the standards of common sense and observation, at least, the three-stage technique worked wonders.[7]

The important phrase in Dr. Suinn’s remark is “by the standards of common sense.” Too often athletes insist on “proof” that mental training works before they give it try. While such athletes wait for ultimate “proof,” some of their competitors are regularly practicing self-hypnosis, visualization, and other mental disciplines—and regularly winning. The haphazard approach to “psyching up” for competition is a thing of the past; yet many athletes still follow this discredited route, despite all the books, tapes, and articles demonstrating the wisdom of doing otherwise. What such athletes need is not “proof” that mental training works, but a dose of common sense.

Building from his experience with the Colorado State skiers, Dr. Suinn next worked with members of the 1976 U.S. Winter Olympics team, and accompanied them to Innsbruck, Austria, the site of the ’76 Games.[8] Working extensively with one cross-country skier, Tim Caldwell, Suinn had “him race—in his imagination—against Olympic competitors.” Besides the visualization, the sports psychologist also had Caldwell practice various physical and technical aspects of his event. This was done because, according to Suinn, Caldwell “was performing inconsistently as the Games approached. The harder he tried, the worse he performed.” The end result of all this training was that “Caldwell skied the relay event in the third fastest time for his lap of the relay, thereby moving the U.S. team from 12th to eighth place.”[9]

In general, what Dr. Suinn did was have the athletes he worked with practice imagery for 30-40 minutes, doing this on three separate occasions. If possible, they were also to perform imagery on the day of their event. Sometimes the race-day imagery session, due to various reasons, lasted much less than 30-40 minutes. Suinn notes that “I spent only 20 minutes in a refresher course for Lyle Nelson on the morning of the Biathlon relay event.” Even so, Nelson surprised everyone with his showing in the 30 Kilometer Biathlon relay. Recalls Suinn:

Nelson, a strong skier, had relative difficulty in shooting accurately. This time, he fired two perfect rounds, shattering five targets each time, and put the U.S. in second place at the end of his tour over the Biathlon course. He far exceeded his own previous performances. . .[10]

Cross-country skier Bill Koch spent even less time practicing imagery before his event. Suinn tells us that “Koch visualized his forthcoming race in less than a minute, while waiting near the starting gate.”[11] Koch went on to capture the silver medal in the 30 Kilometer Nordic skiing event, the best showing ever for an American in this race.

Dr. Suinn brought up these incidents to highlight the value of “even the briefest psychological intervention.” The last-minute imagery “refresher courses” cannot be placed in the haphazard psych-up category because they had been preceded by lengthy, well-conducted mental training

sessions; therefore they were valuable to the athlete, despite their relative brevity.

What mattered in these instances was the quality of the “psychological intervention;” if the quality is there, Suinn essentially tells us, the time spent practicing the mental rehearsal technique is not such a critical factor.

While still on the subject of winter sports, we should note the experience of David Santee, one of the world’s top figure skaters of the early 1980s. Santee employed a simple mental trick, akin to self-hypnosis. As reported by *L.A. Times* correspondent Chris Cobbs, “Santee, a believer in positive reinforcement who has seen ‘Rocky’ movies a dozen times, talks to himself encouragingly as he takes the ice. ‘You’ve trained hard, you’ve skated your rear off, it’s your time now,’ he tells himself.”[12] When Santee told himself “it’s your time now,” etc. as he took the ice, he basically was giving himself a last second autosuggestion.[13] In the ’81 U.S. Figure Skating Championships, Santee’s positive thinking definitely worked. He finished second, and skated magnificently, as did the 1st and 3rd place finishers, Scott Hamilton and Robert Wagenhoffer. Cobbs reported at the time, “Observers agreed that rarely if ever had three men skated to the standard of Hamilton, David Santee, and Robert Wagenhoffer;” also, that Santee and Wagenhoffer “skated to the peak of their abilities.” The goal for any athlete is to perform up to his potential; utilizing proper mental preparation techniques helps one accomplish this. Santee certainly skated up to his potential in the Championships; his success with positive reinforcement shows how valuable practicing even the simplest mental training strategies can be for athletes.

Jack Heise, in his book *How You Can Play Better Golf Using Self-Hypnosis* (1961), told a story about Woodrow Auge, a middle-aged Seattle businessman. One day Heise played a round of golf with Auge, who was having real problems with his game; Auge scored a 126 on a par 72 course. This dreadful golf gave Heise an idea:

I asked Auge if he would mind being a guinea pig for an experiment. A number of other players I knew were using self-hypnosis, but they were experienced in the mechanical movements of the game. He would be the first who might be classified as a beginner to put the theory to a test.

“I have nothing to lose,” Auge said gamely. “I’ll string along with whatever you say if you think I can get to play well enough to make the game interesting.”

In exactly three months, Auge broke 80!

Auge credits the instruction he received on self-hypnosis, which explained the mental side of golf to him, for his rapid improvement.

“I don’t care whether it is in business or golf,” he said, “a fellow isn’t going anywhere until he knows what he is doing. Once I got it through my head about controlling the golf swing with the subconscious mind, the rest came easy.”

Auge, it should be pointed out, practiced a lot during the three months he improved so much. He spent many evenings at the driving range. If Auge had not done this, it is doubtful the self-hypnosis would have helped him as much as it did. To repeat an old song, even though the mental side of your particular sport is important, you still have to be adept at the physical and technical aspects. No matter how mentally tough you are, you are in for a long day if you “lose form” or “gas out” early during competition.

Heise’s book on self-hypnosis for golfers is a path breaker. It was written in 1961, the dark ages of hypnosis. In those days if you used self-hypnosis, people considered you weird. Heise’s effort therefore deserves considerable praise. There are many sections of the book which get you thinking, and that’s the name of the game for any such work.

One section of Heise’s book which really got me thinking was where he related this amazing tale:

Dr. Huber Grimm, team physician of the Seattle University basketball team, recently related the results when Dave Mills, a six-foot five-inch, junior forward, asked for his help because he "froze" during competition. He had been benched on the eve of the West Coast Athletic Conference tournament in San Francisco. Spectators made Mills so fearful that he was afraid he would make mistakes—and in this frame of mind, of course, he did. Under hypnosis, Dr. Grimm suggested to Dave that he would be unaware of the spectators, completely relaxed and would play exceedingly well. Dr. Grimm asked Coach Vince Cazzeta to allow Dave to play and the result was astounding. Mills scored 60 points and cleared 63 rebounds in a single game, and his brilliant play led to his selection on the all-tournament team.

"All I did was free his spirit," Dr. Grimm reported. "He was in need of confidence, and I gave it to him through hypnosis." [14]

After you read dozens of stories of athletes who, after using various mental training strategies, perform wonderfully, setting world records, etc., you begin to believe anything. But, look closely at the above story. Do you know of any college or professional basketball player who has ever scored 60 points *and* cleared 63 rebounds in a *single* game? No one, including Wilt Chamberlain or Kareem Abdul-Jabbar, has ever performed this feat. And we are supposed to believe that a Seattle University forward accomplished this miracle, thanks to hypnosis. This was too much for me to swallow. I tracked down the true story. [15] It turns out that Dave Mills scored 60 points and cleared 63 rebounds in **three** games. This occurred in late-December, 1959, as reported by the *San Francisco Chronicle* (see "Hypnotized Cager Almost Beat Gaels," *San Francisco Chronicle*, December 31, 1959; refer also to the box scores of the three games Seattle played in the West Coast Athletic Conference tournament, appearing in the *Chronicle*, December 29, 30, and 31, 1959). Mills scored 21 points in the first game, in which St. Mary's defeated Seattle, 65-60. The second game saw Seattle beating Pepperdine, 67-66, with Mills scoring 21 points again. In the third game, where Seattle topped Pacific, 83-63, Mills totalled 18 points—giving him 60 points for the *three* games.

All of this is important to bring up—and not mere nitpicking—because some sports psychologists make fantastic claims about their work with athletes. They will boast about their successes, and never mention all the times when the athletes they work with "bomb out" or do not win. This is why I believe sports psychologists, when reporting about their work with athletes, should answer the 5 W's: **who**, **what**, **when**, **where**, **why**. In other words, they should say **who** they worked with, **what** type of mental training was done and what the outcome was, **when** and **where** their work with the athlete took place, and **why** the mental training was performed. By providing this information, others can check up on the accuracy of the claims made by the sports psychologist. Also, a sports psychologist providing such full disclosure is less likely to exaggerate the results of his work in the first place because he realizes how easily misrepresentations can be uncovered.

Aside from Mills scoring 60 points and hauling down 63 rebounds in three games, rather than in a single game, the rest of the story is accurate. He was voted to the all-tournament team, etc. In the *Chronicle* article, Dr. Grimm recounts the specific hypnotic suggestions he gave Mills, and the reasons for doing so:

Grimm said that Mills was a tremendous rebounder in practice, but during a regular game he could hardly get off the floor. His shooting wasn't up to par, either. During a game he would get only seven or eight rebounds and about 10 points.

"About six hours before Monday's game with St. Mary's I put him under hypnosis," Grimm said.

"I told him, 'Tonight you will go out on the floor oblivious to the crowd about you. No other things will be on your mind but to play the most terrific basketball you ever

played. You'll rebound better than ever. When you shoot, instead of there being an indefinable feeling that the ball will not go through the hoop, you will have the feeling that you will score. When you see an opening on the floor, you'll go through when the instant presents itself.”[16]

After giving Mills all these suggestions, Dr. Grimm brought the cager out of the hypnotic trance. “I feel wonderful, more relaxed than in a long time,” stated Mills, who then proceeded to play three straight excellent games. Dr. Grimm cautioned that use of hypnosis cannot turn “a kid who doesn’t know anything about basketball and make a star of him.”[17] But, what it can do, he said, is help an athlete perform up to his full potential. This is what happened with Dave Mills, and it can happen with you, too.

Dr. Grimm, though perhaps one of the first, is certainly not the only person to have hypnotized a college basketball player for performance improvement purposes. In 1964 Arthur Ellen hypnotized the entire University of Houston basketball team, a team which at the time was in a slump. Coach Guy Lewis called Ellen, wanting him to work with his players. A big rematch against Texas A & M was approaching; Houston lost the first time, and Lewis obviously wanted a win this time. Ellen agreed to help, and hypnotized seven members of the squad, working individually with each. Each player possessed a certain weakness, anxiety, or injury which was unduly affecting his play. Just as Dr. McCall did with the Servile High School water polo players (see Swimming chapter), Ellen addressed the specific problem of each player. He stated in his book, *The Intimate Casebook of a Hypnotist*, that each player came out of the session with a “positive attitude about his problem.” There is no disputing the result: Houston upset Texas A & M, 73-65.

Vince Brookins, a forward and most valuable player (1980-81) on the University of Iowa basketball team, took up mental training during his senior year, and saw his play dramatically improve as a result. Brookins relates his experience in Dr. Gauron’s book, *Mental Training for Peak Performance*:

For about a month, Dr. Gauron conducted team meetings with all the players. During this time, he exposed us to numerous techniques including relaxation, concentration, energizing and visualization. At the end of the period of psychological skill training, he continued to meet on an individual basis with those who were interested.

I continued to meet with Dr. Gauron two or three times a week for the rest of the season. We specifically worked on those areas which were hindering me as a basketball player. It took a while for me to see any results. When results did come, they were so convincing that I began to practice the mental techniques every day. Mental training has helped me in areas which have previously been problems for me: concentration, confidence, physical conditioning and intensity on defense. These quickly became positive factors for me. I felt that mental training gave me an added dimension and the upper hand over the athlete who had not had this training. My game is now sound and consistent.[18]

Positive results did not come to Brookins as quickly as they did to Mills or the Houston basketball team, but this can be partly attributed to the fact that the mental training strategies used differed (visualization, “energizing,” etc. vs. hypnosis). In any case, Brookins realized substantial benefits from the mental training soon enough. This pleasing outcome led him to remark that “if you learn the [mental] techniques and earnestly practice, you will be assured positive results not only in athlete performance, but also in other areas of your life away from the world of sports.”

Brookins’ testimonial is of a general nature, making us wonder what he did specifically when he practiced the mental rehearsal techniques.[19] Dr. Gauron satisfies our curiosity on this matter, stating in part:

A few days before a game Vince began a typical session by relaxing his body and inducing an altered state of consciousness. Once this had been accomplished, he engaged in mental rehearsal, generally reviewing the mechanics of shooting while seeing himself shoot baskets with the correct form. He also visualized playing good defense, specifically focusing on hand and foot placement on defense. He then moved on to visualizing himself guarding a specific individual opponent. Assignments had already been announced by the coach and Vince had information from videotapes, scouting reports and previous experience against this ball player to know how to play him. Next Vince reviewed how to manage involvement and concentration in the basketball game. He had learned to repeat to himself as his key word "Intensity," "Intensity." He visualized what he looked like playing intensely during sequences of a basketball game.[20]

In their work with athletes sports psychologists nowadays seem to prefer using visualization, or at least calling what they do "visualization" or "imagery." As resistance to engaging in mental training may arise if the athlete-client hears the word "hypnosis," the cagy sports psychologist merely assigns an unassuming name to the technique presented. James G. Bennett and James E. Pravitz, authors of *The Miracle of Sports Psychology* (1982), came up with an "acceptable" name to the technique which they developed and taught to athletes: Triple Imagery. As defined by Bennett and Pravitz, Triple Imagery "is an in-depth relaxation and programming exercise designed to create a state of disassociation." The authors summarize the technique this way:

Beginning with your scene of nature, you will be taken to your very own mental training room, a room you will design with your imagination. There you will observe yourself on a view screen. This is a third-person view of yourself which can be used for perfecting athletic technique or previewing a competitive event.

You will then leave the mental training room to go mentally to your place of physical training or competition. You will experience yourself in the first person, with the same successful actions you just witnessed in the third person on your viewing screen. You had looked into the future, but now you will act out the script as if it were in the present tense.[21]

This, again, is but a brief summary of the technique. Bennett and Pravitz present 3 1/2 pages of instructions on how to carry out Triple Imagery. These instructions are so lengthy that you will probably need a friend to read them to you, or have them played to you on a tape recorder, to get the whole complicated process down right. After you master the technique, you will no longer require the services of a friend or tape recorder; but, the initial inconvenience requisite in learning Triple Imagery will likely dissuade you and most everyone else from ever giving it a try.

The authors named only one athlete who apparently mastered and applied Triple Imagery: Bill Griffith, a Canadian National Canoe Slalom Champion.[22] Bennett and Pravitz describe interesting physiological and mental powers the canoeist developed through his mastery of Triple Imagery:

Bill Griffith can control the temperature of his hands. Paddling in cold, windy, crashing waters can freeze and stiffen the fingers, causing considerable loss of muscle control that is essential to intricate maneuvering through choppy waters and gates. Through mental mastery Griffith keeps his hands warm, without other aids, enabling him to guide his boat gracefully in and out of course gates.

. . . Griffith, when in his mental training room, would sometimes imagine there was a mechanical track, under the raging river, which followed along the slalom course on which he paddled his canoe. He then imagined his boat attached to a motorized device which could pull his boat along the zigzag course, upstream, downstream, forward, and

backward at speeds that his conscious mind could not accept if he were to do it unaided. Thus he grew accustomed to seeing himself moving at speeds unthinkable by normal standards.[23]

These powers Griffith developed—of regulating the temperature of his hands, and mentally seeing himself canoeing at unthinkable speeds—supposedly played a large role in his doing well in one international race. Triple Imagery, claim Bennett and Pravitz, “worked for Bill as he moved up in the competition and in 1975 placed sixth in world championship canoe slalom competition in Skopje, Yugoslavia.” The two authors’ account contains no comments from Griffith. It would be interesting to hear his side of the story, and learn, for example, how pleased he was with his sixth place finish, as well as with the Triple Imagery technique.

Another story representing only the sports psychologists’ side is found in *Sporting Body Sporting Mind* (1984), by John Syer and Christopher Connolly. The authors describe an “attunement exercise” (similar to visualization) they developed, which they then had Barbara Lynch, a trap-shooter, try out:

Imagine yourself sitting at a desk in front of a window. Look out and notice what you see, what the weather is like, what movement there may be. Then look down at the desk and notice a blank sheet of paper and a pen. Pick up the pen and write down whatever is worrying or exciting you, anything you identify as a distraction. As you write, see the shape of your handwriting on the page, hear the point of your pen slide over the paper, feel the weight of your upper body on your arm. If you find it easier, you can draw a picture to represent the distractions or your distracted mood. When you have finished, put down the pen, fold up the piece of paper and turn around. You see a box behind you. It may be on a shelf or on the floor. Notice how large it is, what color it is, whether it is in the light or the shadow. Open the lid. Then put the folded piece of paper inside the box, close the lid and turn back to the desk, settling back into your chair and once more looking out the window.

Having done this, you can open your eyes, ready to interact with those around you.[24]

Syer and Connolly indicate that Lynch employed the attunement exercise *during* competition; this is exactly the type of capability every athlete, in working with his favorite mental discipline, should strive to perfect. In Lynch’s case, on-site utilization of attunement proved most advantageous, as the authors relate:

There are innumerable distractions that can occur between shooting and preparing for the next shot—other shooters can kick empty cartridges or eject their spent shells in your direction, or a trap machine may break down just as you begin to shoot. Barbara found she was able to pull her attention back to her shooting by finding an image for the distractions and putting that image into a black box behind her.[25]

Syer and Connolly inform us that Lynch, after mastering the attunement exercise, went on to capture the 1979 European 15 Trench Trap-Shooting title. Overall this constitutes a good story; but, like most anecdotes appearing in books by sports psychologists, it suffers from the deficiency of not including any testimonial from the athlete. We are, once again, placed in the position of having to take the authors’ word for everything that happened. Until we hear what the athlete himself says, we cannot be certain that important (and perhaps embarrassing) details have not been glossed over or suppressed.

One important detail definitely worth mentioning is the outcome of the U.S. Women’s Olympic Volleyball Team’s participation in the 1988 Games. Before the Seoul Olympics the team’s coach, Terry Liskeyvych, raised expectations that his squad would perform wonderfully by making

certain high-sounding comments. We are informed, for example, in the September 19, 1988 issue of *Time* magazine that Liskevych possesses a Ph.D. in sports psychology and believes that "the key to success comes from having the right frame of mind" (see "The Drive to Win: A coach's perspective," in the magazine just cited). To help attain this worthy state of mind, it was reported that "the coach employs the services of a 'Performance Enhancement Team'—three trained sports psychologists who work with team members to sharpen their mental focus and confidence." Between Coach Liskevych, with his Ph.D. in sports psychology, and the three other sports psychologists assigned to help the players, you would think that the U.S. women's volleyball team should have been extremely well-prepared mentally for the Olympics; and, in fact, one had to endure in reading the *Time* article such wishful hype as the following:

"We're operating as a whole today," Liskevych says confidently. "But we're a whole that's stronger because each individual is stronger. We're in the right frame of mind now, and we intend to take home a medal."

If you gained the impression in perusing Liskevych's remarks (not all of which, in the interests of space, have been presented here) that the world may never have heard the end of it had his team brought home a medal, you are not alone. So, did Liskevych's players return from Seoul with some loot? The reality is they did *not*. While the U.S. Women's Olympic Volleyball Team may have possessed the "right frame of mind" during the '88 Games, they finished in seventh place, losing to Peru and China. One does not know for sure where things went wrong—the opposing teams could have been using hypnosis or visualization, too, keep in mind—but certainly blame cannot be attributed to there being a lack of sports psychologists working with the U.S. players.

Mental training, as I pointed out at the start of this chapter, can be done for free. It is always refreshing to discover instances of athletes learning and practicing mental training strategies on their own. During the National Outdoor Racquetball Championships, in July, 1978, I refereed a men's "Open" doubles match that was unusual in one respect: one of the players, John Alcala, sat down and closed his eyes during every time out. I guessed he was meditating. After the match I asked him if this were so. He answered, "No, self-hypnosis!" We talked quite a while, and Alcala recited a typical self-hypnosis testimonial; his concentration had immeasurably improved, he was now making his kill shots, and so on.[26] Alcala had read a book on self-hypnosis, and by following its recommendations learned the discipline; he then applied the mental technique to his sport. Once again, we see that learning self-hypnosis does not require vast expenditures of money. Reading a book on the subject can suffice (followed, of course, by diligent practice).

An excellent example of an athlete learning a mental training strategy through reading, then successfully applying that acquired capability to his sport, is seen in the experience of Glenn Yothers. Yothers used visualization in the National Outdoor Racquetball Championships, held in Costa Mesa, California, in 1981 and 1982, making it to the semi-finals both years in singles and doubles in the "B" division. As of December, 1985, when I interviewed Glenn, he had placed high in 25 other racquetball tournaments, "winning three of them," he said, "with one of them being the 'A' division of an indoor tournament in Rosemead"[in California]. Yothers was not taught visualization; instead, he was *self-taught*, stating, "I read an article in *Racquetball Illustrated* which was written by a pro who stressed the importance of visualization, and how he used it before, during, and after his matches." After reading the article, Yothers adopted visualization for his tournament play. He relates precisely how he employed this mental discipline:

The main technique that I used was a visualization of myself in an ideal situation. In racquetball an ideal situation for ending a rally is hitting a "kill shot"—putting the ball away. So, I would visualize myself killing the ball and ending the rally, giving me the point or serve back.

Mostly I did the visualization at night before going to bed—especially the week

before a tournament, with emphasis on the two days prior to a match. I would spend 10-15 minutes concentrating on myself hitting the perfect serve, perfect passing shot, and perfect kill shot. I pictured myself doing this sometimes in slow motion and sometimes in normal speed.

I also sometimes did visualization before the match; I'd find a quiet corner of the locker room, sit down, and spend a minimum of 10 minutes visualizing.

Yothers contends that he rarely uses visualization during play, but that he occasionally employs it during the 1-2 minutes allowed between games. Notes Yothers, "During the match you really don't have that much time to visualize because you're pretty much concentrating on the game. The visualization supposedly has already done its work." This observation is in accord with that made by Ken Norton, the ex-heavyweight boxing champion, who regularly practiced self-hypnosis. Norton, as we recall, said that he did not try to use hypnosis during a round because "you don't have time to stop and think during a fight" (see Boxing chapter). The assertion I made in the Boxing chapter—that athletes receiving proper hypnotic suggestions before competition are adequately prepared, and therefore do not have to worry about using self-hypnosis during competition—can be extended to include visualization as well. As Yothers observed, the technique "has already done its work" (properly programmed your subconscious) if engaged in beforehand. So, the main thing for athletes, and you, to remember is this: practice your preferred mental rehearsal technique **ahead of time** and **regularly**. Doing this is the bread-and-butter of mental preparation. If you want some frosting—by practicing your favorite mental discipline just before competition begins or during the competition—that is all right. But, make sure you have taken care of the bread-and-butter part first, because that is what is going to carry you to victory 9 times out of 10.

Yothers estimates that visualization improves his game by 20%, and correctly points out that this amount of improvement "can be the difference between winning and losing. I have won a number of matches by only 1 or 2 points." As the athlete climbs the ladder in ability and skill level, improvement comes harder and harder. Yothers turned to visualization for an extra boost to his game, and the technique came through for him. And—most importantly—he improved his game by 20% by doing only two things: 1) he read an article on visualization, and 2) he applied the article's recommendations. The only expenditure Yothers laid out in experimenting with mental training was his own time.

Again, you cannot use cost as an excuse for not learning some mental training strategy. Libraries across the land carry books and magazine articles on visualization, self-hypnosis, and the like, with many of these works geared towards promoting mental disciplines for sports applications. All you have to do is go into the library, check out a book or magazine which discusses a mental rehearsal technique that appeals to you, read it, and then practice the technique. The price is right: **free**. If you cannot get the mental discipline down on your own, investigate another; maybe the new one will work for you. If you are still unsuccessful, then seek out a sports psychologist or hypnotist, and spend a little money. But, chances are you will probably be able to master some mental training strategy all by yourself, just like so many other athletes making the effort have done.

In the late 1970s and early 1980s racquetball players who did not like to read books or articles were able to investigate hypnosis without spending much money. Charlie Brumfield and Dr. Richard Garver produced and marketed a cassette tape called "Hypnosis Racquetball Tape." Brumfield is a five-time national indoor racquetball champion, and once won a record 20 tournaments in a row. I had heard the report that Brumfield used self-hypnosis, and was curious to hear what he said on the tape. I therefore obtained the tape, and listened to it with keen interest. Dr. Garver comes on the tape first, and starts off by making some general remarks about hypnosis. For example, he states that with hypnosis you can "actually program the correct skill pattern

before you physically use it." One of the tape's main objectives, in fact, is to get you to do this. Dr. Garver then in a friendly and reassuring voice instructs you:

Sit down or lie down in a comfortable position and relax. Just relax and listen to my instructions. You now just close your eyes and relax. Picture yourself on the top of a staircase.

Dr. Garver next tells you to mentally imagine yourself descending the staircase. Upon reaching the bottom of the staircase, you are informed, perhaps to your surprise, that "what you see is a racquetball court." Dr. Garver at this point introduces the head pro, Charlie Brumfield, who takes it from there. By now, if you have followed Dr. Garver's instructions, you should be in a light hypnotic state, and presumably receptive to what Brumfield's about to say.

Essentially, what Brumfield does is go over the fundamentals of racquetball. He talks about proper grips, the backhand and forehand, high percentage shots, and so on. Brumfield explains all this so clearly that any racquetball player would gain a lot from listening to what he says. At times Brumfield's insights are ingenious. His discussion of concentration falls into this category:

I find that most human beings are incapable of concentrating for over 7 points at a time. So, when I get an 8 point lead, I'll say to myself, "OK, the game's even. I'm going to play this guy for 7 points." And then I'll go as hard as if it were 0-0 and we're going to 7. As long as I beat my opponent in each of these small mini imaginary games, I'll eventually be the first to 21. So, cut the game down to the basics, so that you can concentrate during the whole time, rather than trying to extend your concentration over a 2-hour match or even a 1-hour game. Concentrate over 10 minutes—7 points—and you'll find yourself much sharper and much better able to cope with the pressures of the match.

Brumfield says to himself, "OK, the game's even. I'm going to play this guy for 7 points." Is this a hypnotic suggestion he gives himself? Brumfield never directly states that he uses self-hypnosis, but he leaves you with that impression. For when Brumfield finishes his talk, he concludes by emphasizing this:

The main thing is first get the visual imagery of hitting the shot. Because you can practice just as much when you're not on the court through the state of hypnosis as you can when you're out there actually pounding the ball.

It is doubtful Brumfield would advise racquetball players to use hypnosis if he himself does not practice the technique. In any case, Dr. Garver now comes back on the tape, and tells you that you can return to normal consciousness by counting to three. He concludes by encouraging you to use the hypnosis procedure to learn and practice the lessons taught by your own club pro—a well-considered touch.

Brumfield and Dr. Garver really produced a first-class instructional tape in the "Hypnosis Racquetball Tape." Unfortunately, Dr. Garver informed me in May, 1986 that it is no longer being marketed. He did say, however, that he was working on a golf hypnosis videotape, and that mental training audio tapes are now, in his opinion, somewhat obsolete.[27] According to Dr. Garver, mental training videotapes, where you can see what you should be doing, are the present state of the art.

There are many ways to tap one's hidden powers, and many hidden powers one can tap. Those who have explored the martial arts can attest to this. (The martial arts are the self-defense sports, such as karate and judo.) We shall now look at one hidden power which most athletes may be well-advised to tap.

David Taylor, in an April, 1979 *Blackbelt* magazine article, discusses the interrelationship

between *chi* (the individual's vital force) and the *tan tien* (a point on the lower midsection). He says in part:

The Taoists defined the chi as breath, blood and sperm, which Marshall Ho'o, founder of the National Tai Chi Chuan Association, has explained means control of the breath by sinking it to a point three fingertip-lengths below the navel (called the tan tien), the control of the mind by sinking that also to the tan tien, and the tapping of the sexual drive.

. . . According to one kendo practitioner, ki (the Japanese word for chi) rises from the legs and collects at the tan den (Japanese for tan tien), but here the tan den is a focal point for the ki, not the origin. From the tan den, the ki goes to where the warrior wills it.[28]

Taylor discusses more about all this than I'll relate here; his bottom line, though, is that super-human feats are possible if you can harness your chi. The point is probably well taken. One becomes continuously intrigued by weight lifters: 1) emphasizing the conditioning of their stomachs during workouts, and 2) pointing with pride at that part of their body as their source of strength. A pertinent example is the massive stomach of Vasily Alexeyev, the Soviet giant, who set innumerable records in the superheavyweight division. Sports commentators frequently noted that Alexeyev's awesome midsection was the secret to his incredible strength. Whether true or not, it is worthy of consideration. As Taylor observes, "there are many who dismiss the concept of internal energy as myth because Western study of it is limited. Nevertheless, there are too many powerful people practicing these internal-energy arts for these arts to be easily explained away by Western science."

In the April, 1978 issue of *Blackbelt*, Robert Stewart goes into considerable detail about what proper body positioning, as it relates to the tan den, accomplishes. It turns out that sitting in the full lotus position (sitting position with your feet placed on opposite thighs) is vital for the successful practice of zen meditation, also called *zazen*. *Zazen*, Stewart informs us, develops the martial artist's "attitude of alert no-mind—of moving without awareness of self." It "promotes deep abdominal breathing so necessary for the focus of punches," and also "helps in concentration of energy in the *tan den*, a point below the navel which is considered the body's center of gravity in all karate stances."[29]

Stewart then elaborates on the main advantage of the full lotus position: it places your body's center of gravity at the tan den. This being the case, the cerebral cortex in your brain can be stimulated to what Stewart calls wakefulness, "a kind of natural 'high' or feeling of great inner peace and oneness." This stimulation of the cerebral cortex occurs when you breathe deeply (abdominal breathing) while sitting in the lotus position. Stewart gets quite technical at this point, but suggests an easy test for you to try:

To test this process, try the following experiment. Using a watch with a second hand, attempt to keep all thoughts and ideas out of your mind for one full minute, breathing normally. Next, take a deep breath and expel it by contracting the abdominal muscles. When the breath has been entirely expelled, hold the abdomen still without breathing and concentrate on keeping all ideas and thoughts out of your mind.

You will discover that as long as you keep from breathing you will keep your mind clear easily. Without the tension produced by holding your breath, however, a host of ideas begin invading the clarity of your consciousness, no matter how hard you try to keep them out.[30]

I have tried this test, and had others do it as well. It does work. No doubt the abdominal breathing while sitting in the lotus position would also work, bringing on that inner peace medita-

tion provides. Unfortunately, some people are unable to assume the full lotus position for various reasons—such as, their leg muscles being too tight. Stewart presents a practical alternative for such people:

Ideally, one assumes the full lotus position. But most beginners find it impossible to place the feet on opposite thighs. A compromise is to place the right foot under the left thigh. The result is called hanka fuza, half lotus, which, since it is asymmetrical, tends to be unbalanced. Gradually with practice, most people eventually are able to assume full lotus.

This half lotus position is easily accomplished without much difficulty. Asymmetrical as it is, one can sense some of the good feelings Stewart talks about, for your center of gravity in the half lotus position is still located near the midsection. Everything will seem concentrated right there.

You might still be wondering what zen meditation has to do with athletics. Stewart says that zazen “is an effective tool for coordinating mind and body.” Therefore “a few minutes a day of zazen practice will help the martial artist bring mind and body into closer coordination, the ultimate aim of both zen and karate.” Assuming zen meditation helps coordinate the mind and body, every athlete could benefit from practicing the discipline; for there is not a single sport which does not require substantial coordination of the athlete’s mind and body.

Though the exception rather than the rule, a few martial arts instructors teach hypnosis to their students. The most noteworthy case on record of this was reported in *Blackbelt* magazine (October, 1973), in a marvelously captivating article, “Hypnotism in Self-Defense.” The article features James DeMile, a Honolulu kung-fu instructor, who both hypnotized and taught self-hypnosis to his students. Several remarkable pictures appear in this article. One is of DeMile hypnotizing his class (all the students are in a trance). There is also a series of pictures showing DeMile practicing his moves with his eyes closed (supposedly he is in the hypnotic state). DeMile, who at the time of the article’s publication was on the Board of Directors of the Hawaii Clinical Hypnosis Association, explains why he advocates hypnosis for the martial artist:

Through the process of hypnosis, a student can conquer tension—the enemy of all athletes. He can heighten his manual dexterity, develop more fluid movements, react more swiftly, shorten the time span normally required to learn a given technique, and achieve a very high level of self-confidence. When confronted by a stress situation such as a street fight, the practitioner finds himself more relaxed and thereby reacts in a more efficient manner.[31]

DeMile was one of the few students of the immortal Bruce Lee. This unsurpassable experience was not lost on him; for DeMile’s teaching reflects Lee’s emphasis on internal growth, as opposed to external fighting skills. Says DeMile:

Today, I use a modern scientific approach known as hypno-cybernetics. Hypnosis is a vehicle whereby information is fed back to the subconscious. We follow a step-by-step program based on the latest scientific studies of hypnotic techniques, suggestion formulation, and personality research. Wing chun do along with hypno-cybernetics is an opportunity for my students to grow and become better people by realizing their inner potential. Emotional conflicts, distorted ideas, or a faulty self-image may be stumbling stones in my student’s search for self-development. By working closely together, we can clear the path and help a person to resolve his own conflicts, correct his self-image and reorganize his personality and approach to life. This, to me, is the “building of character” often stressed in martial arts training.

Elsewhere in the article, DeMile lists six steps his students follow when practicing self-hypnosis. These six steps are fairly standard. Most people succeed in entering and coming out of

the self-hypnotic state by following them:

1. Get comfortable, relax, clear your mind of any outside thoughts, and suggest to yourself that you will soon enter a pleasant state without any resistance.
2. Perform a predetermined action (known as your “key”), which signifies that you are now entering a hypnotic state.
3. Relax every muscle and nerve in your body. Go deeper and deeper. Concentrating only on your own thoughts, count backward from 10 to zero as you go into a deep hypnotic state.
4. Lock yourself into this deep trance. Do not arise from this state until you awaken yourself. You will not fall asleep or lose control of the trance. Prepare to give yourself positive suggestions.
5. Give suggestions or lock into DeMile’s suggestions.
6. Prepare to awake yourself, feeling refreshed and alert without any mental or physical discomforts. All the positive suggestions given will be followed. Using a count of one to five, slowly awaken. At the count of five, you will be wide awake, feeling very pleasant throughout the mind and body.

Adhering to these six steps takes a little more time than what other self-hypnosis induction procedures involve. But, a patient approach is never a bad idea.

As should be evident, DeMile presents his teaching philosophy and knowledge of self-hypnosis most authoritatively; in fact, his comments constitute a real *tour de force*. Especially if you are a beginner in the martial arts, try to obtain his *Blackbelt* article for reference.[32]

In general, the martial arts stress the importance of developing the total person. Oriental thinking holds that one’s mind, spirit, and character require as much strengthening and conditioning as the body. This holistic philosophy makes a lot of sense. After all, an athlete lacking self-discipline, one who is experiencing personal problems, or one who is dishonest with himself will not succeed for long in his sport. He will cut corners, perhaps cause dissension on the team, and not make the necessary sacrifices essential to being a top athlete.

One of the best examples of how the Eastern way of strengthening the mind, spirit, and character can lead to improved athletic performance is found in Eugen Herrigel’s classic book, *Zen in the Art of Archery*. Herrigel, while living in Japan for seven years, was intent on discovering the essence of Zen. Having been told to take up one of the “arts” to help him in his quest, he chose the art of archery. Archery in Japan is considered an art, rather than a sport, though Japanese Master archers perform feats with the bow and arrow that Olympic archery champions would be hard-pressed to match. The Eastern versus Western approach to archery can be summarized in this diagram:

East	—	art (archery)	==>	Zen
West	—	sport (archery)	==>	?

Taking up archery in Japan is therefore simply a means to a greater end.

Herrigel, under the guidance of a Master archer, first encountered difficulty in drawing the bow. The Master, never losing his patience, kept encouraging Herrigel in his efforts, telling him to “Relax! Relax!” Weeks went by and Herrigel still could not get it right. He relates what eventually:

The day came when it was I who lost patience and brought myself to admit that I absolutely could not draw the bow in the manner prescribed.

"You cannot do it," explained the Master, "because you do not breathe right. Press your breath down gently after breathing in, so that the abdominal wall is tightly stretched, and hold it there for a while. Then breathe out as slowly and evenly as possible, and, after a short pause, draw a quick breath of air again—out and in continually, in a rhythm that will gradually settle itself. If it is done properly, you will feel the shooting becoming easier every day. For through this breathing you will not only discover the source of all spiritual strength but will also cause this source to flow more abundantly, and to pour more easily through your limbs the more relaxed you are." [33]

The Master's suggestion worked, leading Herrigel to ask his friend, Mr. Komachiya, why the Master had not told him to breathe correctly in the first place. Explained Mr. Komachiya:

A great Master must also be a great teacher. With us the two things go hand in hand. Had he begun the lessons with breathing exercises, he would never have been able to convince you that you owe them anything decisive. You had to suffer shipwreck through your own efforts before you were ready to seize the lifebelt he threw you. [34]

Other difficulties presented themselves to Herrigel. One major roadblock occurred when he worried about his arrows not hitting the target. Because he worried about where his arrows landed his progress came to a standstill. But, a remarkable demonstration by the Master—wherein the Master in total darkness shot a bull's eye, and then splintered the first arrow with a second—helped Herrigel overcome the psychological barrier of worry. Weeks, then months of diligent practice ensued, leading to the critical breakthrough:

One day the Master cried out the moment my shot was loosed: "It is there! Bow down to the goal!" Later, when I glanced towards the target—unfortunately I couldn't help myself—I saw that the arrow had only grazed the edge. "That was a right shot," said the Master decisively, "and so it must begin. But enough for today, otherwise you will take special pains for the next shot and spoil the good beginning." Occasionally several of these right shots came off in close succession and hit the target, besides of course the many that failed. But if ever the least flicker of satisfaction showed in my face the Master turned on me with unwonted fierceness. "What are you thinking of?" he would cry. "You know already that you should not grieve over bad shots; learn now not to rejoice over the good ones. You must free yourself from the buffetings of pleasure and pain, and learn to rise above them in easy equanimity, to rejoice as though not you but another had shot well. This, too, you must practice unceasingly—you cannot conceive how important it is." [35]

In all Herrigel spent five years in becoming a Master archer, and in the process lost "the last traces of any preoccupation with myself." He reached the point where "bow, arrow, goal and ego, all melt into one another, so that I can no longer separate them. And even the need to separate them has gone." He also attained his goal of realizing the essence of Zen, fully understanding the meaning of this mystical contention of the Master:

"He who can shoot with the horn of the hare and the hair of the tortoise, and can hit the center without bow (horn) and arrow (hair), he alone is Master in the highest sense of the word—Master of the artless art. Indeed, he is the artless art itself and thus Master and No-Master in one. At this point archery, considered as the unmoved movement, the undanced dance, passes over to Zen." [36]

Most Western athletes strive to improve their performance immediately. This relative impatience leads them in the direction of relying on external solutions to problems. For example, one typical way a Western athlete will try to conquer a problem is by purchasing a new piece of equipment, instead of analyzing his mental attitude and by changing it for the better. But, if the new

piece of equipment does not help, then what? The athlete unaccustomed to considering internal solutions (i.e., working on his mental attitude, concentration, etc.) is lost. It took Herrigel five years to become a Master archer, which is how long it took him to completely change over from Western to Eastern thinking. Patience and perseverance found their reward. Undeniably, adopting Eastern thinking, through the practice of martial and other arts, is only one way to improve one's self-discipline, mental outlook, concentration, and by consequence, athletic performance; however, as Herrigel's experience demonstrates, Western athletes would be wise to investigate this internally-oriented approach further.

Preparing yourself mentally for competition, by using the mental training strategy of your choice, can lead to extraordinary performances. The athletes featured in this chapter found this out. Many of them also discovered that learning and applying mental rehearsal techniques can be accomplished for free, with time comprising the only expenditure. There is no reason why you cannot follow the path of these athletes. Read books and articles on mental disciplines, listen to tapes or watch videos on the subject, and then regularly practice the mental rehearsal technique that appeals to you. The results you will then experience in your athletic performance should prove most gratifying.

FOOTNOTES

1. Bob Lochner, "Stock Becomes Blue Chip as Austrian Wins Downhill," *Los Angeles Times*, February 15, 1980, Part III, p. 1.
2. Corky Fowler and Christopher Smith, *The Hidden Skier*, (Chicago, Illinois: Contemporary Books, 1977), p. 20.
3. Ibid., pp. 73-74.
4. Ibid., pp. 90-91.
5. Refer to the study in the Soviet Athlete chapter about the 1980 Soviet Winter Olympic athletes who spent varying amounts of time on physical training and mental training. Note that Group IV, which allocated 75% of their time to mental training and only 25% to physical training, outperformed the other three groups, who spent more time on physical training. Zurbriggen's training regimen, after his knee injury, probably resembled Group IV's.
6. Richard M. Suinn, "Body Thinking: Psychology for Olympic Champs," *Psychology Today*, July, 1976, p. 41.
7. Ibid., p. 43.
8. Dr. Suinn also discusses in his article his work with U.S. pentathlon athletes who were preparing for the 1976 Summer Olympics. How much these athletes benefitted from using visualization is very difficult to ascertain because none of the people Suinn specifically named made the 3-man U.S. Olympic Pentathlon squad. Those that did make the team—and they may or may not have worked with Dr. Suinn—finished individually in 6th, 16th, and 26th place, which translated into a fifth place finish overall for the U.S. Pentathlon team.
9. Suinn, *op. cit.*
10. Ibid., p. 38.
11. Ibid., p. 43.
12. Chris Cobbs, "As Skating Finals Go, U.S. Men's Comes Close to a 6.0," *Los Angeles Times*, February 9, 1981, Part III, p. 6.
13. Santee apparently did not develop this psych-up procedure on his own. While experiencing problems with his confidence prior to the 1980 Winter Olympics, Santee visited sports psychologist Dr. Bruce Ogilvie (see "The Eastern Bloc Comes Into L.A. With a Head Start," *Los Angeles Times*, January 25, 1984). Dr. Ogilvie taught Santee to recite to himself before taking the ice: "David, you are now ready. This is your crowd. Go do it." Only in form does this message differ from the "it's your time now" one; the themes of both are practically the same.
14. Jack Heise, *How You Can Play Better Golf Using Self-Hypnosis*, (North Hollywood, California: Wilshire Book Company, 1961), pp. 123-124.

15. This was not easy because Heise did not say what year the incident occurred. Still, the anecdote contained enough information for a good investigative effort to be launched.
16. Dr. Grimm, a physician, assumed the role of problem-solver, which is what most physicians are trained to be—problem-solvers, rather than *problem-preventers*. As noted in our chapter on Professional Athletes, many sports psychologists are trying to emphasize to coaches and athletes the problem-prevention benefits of mental training. They advocate a year-round or season-long mental rehearsal training program, preferably under the guidance of a sports psychologist, for college and professional teams. If Mills had had such guidance, using mental rehearsal techniques the entire season, he probably would never have developed the tendency to “freeze” in the first place; so say the sports psychologists.
17. “Hypnotized Cager Almost Beat Gaels,” *San Francisco Chronicle*, December 31, 1959, p. 1H.
18. Eugene F. Gauron, *Mental Training for Peak Performance*, (Lansing, New York: SportScience Associates, 1984), p. iv.
19. Pro-mental training testimonials made by others involved in amateur athletics appear in Dr. Gauron’s book. For example, Robert Leverence, a pommel horse specialist on the Iowa Gymnastics team (1980-1984), and Tom Dunn, the Iowa Gymnastics Head Coach, volunteer extensive remarks on mental training’s usefulness.
20. Gauron, *op. cit.*, p. 147.
21. James G. Bennett and James E. Pravitz, *The Miracle of Sports Psychology*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1982), p. 80.
22. Bennett and Pravitz observe that Triple Imagery, like most other mental disciplines, “can be used on site, just a few minutes before actual competition; but, it must be mastered first, to be effective.”
23. Bennett and Pravitz, *op. cit.*, pp. 85-86.
24. John Syer and Christopher Connolly, *Sporting Body Sporting Mind*, (Cambridge: Cambridge University Press, 1984), pp. 14-15.
25. Ibid.
26. I myself have used self-hypnosis in racquetball with success. In one tournament held in August, 1978 at Orange Coast College in Costa Mesa, California, I gave myself low-key general autosuggestions before the competition. The main autosuggestion I employed was to “go out there and just do the job.” This general autosuggestion worked very well for me. I played perhaps the best racquetball of my life, and came away with a trophy (I only lost to the first seed, Jeff Martindale, in three close games).
27. For more information on this videotape, contact: Director of Golf, The Dominion Country Club, 12042 Blanco Road, San Antonio, Texas 78216.
28. David Taylor, “The Search for Power in the Martial Arts,” *Blackbelt*, April, 1979, pp. 58-60.
29. Robert E. Stewart, “Zazen and the Martial Arts,” *Blackbelt*, April, 1978, p. 25.
30. Ibid., p. 26.
31. Eugene H. Ho, “Hypnotism in Self-Defense,” *Blackbelt*, October, 1973, pp. 28-34.
32. Blackbelt sells back issues, so you may wish to write to them at: Rainbow Publications, 1813 Victory Pl., Burbank, CA 91504.
33. Eugen Herrigel, *Zen in the Art of Archery*, (New York: Random House, 1971; originally published 1953).
34. Ibid.
35. Ibid.
36. Ibid.

MENTAL TRAINING STRATEGIES TIME LINE (SOVIET ATHLETE)

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Mental Training Sessions

(Autogenic training, hypnosis, meditation, autosuggestion, and “psychic regeneration” employed by Soviet and East German elite level athletes, according to Dr. Kroger, *Track and Field News*, Kurt Krueger, and others; Dr. Pavel Bul’s hypnosis work; Vladimir Kuzmin taught visualization to 600 athletes; Janis Donins practiced yoga; daily “relaxation sessions” for the Soviet national basketball team)

Develop the Athlete's “Individual Style”

(Blumenstein and Hudanov recommended autogenic training, breathing exercises, self-commands to perfect one's “internal” or “external” orientation and emotional regulation)

Goal-setting, Self-assessment

(Zobkov trained young sprinters to engage in these, as well as learn “self-regulation,” with the athletes experiencing great progress)

Meditation Sessions

(Viktor Korchnoi cited these as responsible for his nearly winning the world chess title)

Hypnosis Tape

(Gamal played this to a group of wrestlers at night, and found it “wholly effective”)

Actualize Goals

(Gorbunov says it is best to do this in the last few minutes or seconds before the event; five minutes before a race Olympic gold medalist Valery Borzov focused his mind on running, becoming angry with someone)

Use of Imagery

(Borzov did this while warming up)

THE SOVIET ATHLETE: ARE THE REPORTS TRUE?

There has been a lot of conjecture about the use to which athletes of the Soviet Union and Eastern Europe put hypnosis, or other mental training strategies, in preparing themselves for competition. Reports have it that all Soviet Olympic athletes regularly participate in mental training sessions. If these reports are true, disappointing performances of U.S. athletes, when competing against their Soviet counterparts, could be rationalized. Apologists could say that the Soviet athletes possessed a clearcut mental edge over our athletes; therefore, our team members were not competing on equal terms.

Stories that all Soviet Olympic athletes have been using hypnosis for ages exaggerate the actual situation. It can be said that during the 1970s *some* elite level Soviet athletes used hypnosis, but probably not the majority. In the 1980s, however, it is likely the case that most Soviet Olympic athletes employed mental rehearsal techniques such as hypnosis. To better understand this development, this chapter will be divided into two parts: one covering the 1970s, the other the 1980s.

1970s

Let us look at some of the reports appearing in the 1970s about USSR athletes using hypnosis, and evaluate the validity of these reports. A typical comment about the Soviets using hypnosis appeared in an article by Dick Douce in the July, 1979 issue of Joe Weider's *Muscle* magazine. Douce remarked:

A stark reality the world of sports must face today is that the Russians are light-years ahead of the United States in using hypnosis to train their Olympic athletes. Many experts believe the Soviets will hold a big advantage over the American team in 1980 because of their adroit use of hypnosis to "psych up" their athletes.[1]

Douce did not provide the name of a single Soviet athlete who utilized hypnosis, nor did he give the name of any Russian coach who instructed his athletes in the use of hypnosis. This does not necessarily make Douce's remark false; for perhaps it was based on other reports (such as the one made by Dr. Kroger which we'll soon examine) that contained more specifics. Douce's analysis, if nothing else, conveyed a sense of urgency by the use of such expressions as "stark reality," "light-years ahead," and "adroit use of hypnosis." The implication seemed to be that the U.S. should close the athletic "mental training gap" that Douce felt existed between the Soviet Union and U.S.; this "mental training gap" allegation came up frequently during the '70s and '80s, as we'll observe throughout this chapter.

Dr. William Kroger also wrote about the Soviet athlete in his textbook on hypnosis, *Experimental and Clinical Hypnosis* (1977). In this book Dr. Kroger states:

The Soviets have developed the practice of "psyching up" athletes for sports competition into a science. They, too, have used hypnosis, autogenic training, and other psychologic methods. These technics were first employed on the Soviet bicycling team with such great success that they won a gold medal at the 1972 Olympic games at Munich. The technics were especially valuable for those facing a competitor who had always beat them. An institute in Kharkov holds regular classes for coaches who specialize in psychological technics to be used in preparing Soviet athletes for the 1980 Olympics.[2]

I telephoned Dr. Kroger, and asked him how he had obtained this information. Dr. Kroger replied that he had read about it somewhere (he was unable to be more specific). So, the question becomes: was the original newspaper or magazine article that Dr. Kroger read correct?

Without actually talking to the Soviet athletes themselves, we shall be hard-pressed to determine the validity of such reports. Dr. Kroger did not talk to the Soviet athletes or coaches; he just restated what someone else said about them. Even if the report in question proved false, though, Dr. Kroger is unlikely to back down from his belief that hypnosis can enormously benefit most athletes. He says in his book: "I cannot understand why more amateur and professional coaches do not use qualified, psychologically trained hypnotists to potentiate physical performance."^[3] I fully agree with Dr. Kroger that a team might profit by having a hypnotist on the staff, providing the hypnotist, no matter how "qualified," enjoys good rapport with the players.

During the 1970s speculation was also rampant about what the East German athletes were up to. For example, Dr. Richard Suinn contended that "East Germany, a relatively recent entry into the Olympic arena, has introduced rigorous psychological training for its athletes. In the 1976 Winter Games, they carried away the second highest number of medals."^[4] No amplification, unfortunately, on these intriguing remarks was made. Dr. Suinn did not define what the "rigorous psychological training" involved or how he knew such training was taking place. Also, his subtly linking the existence of the alleged mental training to East Germany's second place finish in the 1976 Winter Olympics reveals a certain bias on his part. This bias is quite understandable in light of Dr. Suinn's being a sports psychologist and his wanting to see wider use of the services of sports psychologists—such as himself, no doubt—by U.S. Olympic athletes. (Dr. Suinn did, in fact, work with several members of the 1976 U.S. Winter Olympics squad; refer to the Amateur Athletes chapter.)

Another report about the East German athletes appeared in the November, 1976 *Track and Field News*, and created a real sensation. The article, titled "East German SECRETS?", stated in part:

Out of the xerox jungle comes interesting information, purportedly the daily "treatment" regimen followed by East German weight-eventers during their pre-Montreal training.

It is noteworthy that in addition to closely monitored physical and mental training regimens, banned steroid substances, such as Deca-Durabol and Winstrol, are prominently employed.^[5]

Thirteen elements of the weekly routine were then listed, including:

- 7) Mental training sessions, once or twice daily, including hypnosis, auto-suggestion, meditation, discussion, psychology.
- 11) Awareness of physical and psychological highs and lows of biorhythmic curves.
- 13) Undisclosed "psychic regeneration" after hard training and competition.^[6]

It was this mental training part of the article which aroused the interest of many U.S. athletes, who had hardly heard of anything like this being done before (keeping in mind that we are talking about the 1976 time period). *Track and Field News*, again, did not reveal the source of their information; merely saying that "the xerox jungle" supplied it implied that the story was surreptitiously obtained, perhaps from one of the East German athletes. Also, precise details about the mental training sessions and the "psychic regeneration" were not divulged. In short, the whole report was so mysterious it assumed incredible believability.

These reports of Soviet and East German athletes using hypnosis and other mental training strategies not only generated substantial interest but also controversy as well. Some people expressed opposition to mental training, incorrectly regarding it as a sort of mind control or automation-creation process. For example, Henry Gris and William Dick, authors of *The New Soviet Psychic Discoveries* (1978), apparently consider this type of activity as unethical or wrong. Gris and Dick visited the Soviet Union several times from 1972 to 1977 in researching their book, and in the process interviewed a few famous Russian hypnotists. One was Dr. Pavel Bul, a Leningrad hypnotist at the Pavlov Medical Institute, who supposedly programmed a boxer to victory. As Gris and Dick relate it:

Bul had told us about the boxer who, worried about the outcome of his forthcoming bout, came to ask for help. Bul put the man in a hypnotic trance and told him not to be afraid, that he would be better than he ever was. Bul then told him he would lick his opponent, knocking him out with a series of vicious, destructive blows in the sixth round.[7]

Bul informed Gris and Dick that this is exactly what happened in the fight. The fact that these suggestions worked in this fight does not, of course, mean that they would work the next fight. Ken Norton, who used hypnosis in preparation for his fights with George Foreman and Ernie Shavers, *losing* by knockout in both, could tell you that. Gris and Dick reacted quite negatively to Bul's story, with Gris expressing his concern to the press this way:

There is no doubt this man was telling the truth. He is an internationally known scientist. What scared me was the ease with which he was talking about it... the possibility of hypnotizing people for any contest and defeating the basic premise of sport.

From his point of view, it was merely augmenting the abilities of people with reserve which we all have within ourselves but never use... Now, if one man has been hypnotized to win a bout, there is no reason to believe they (the Soviets) will have any special consideration for the tradition of the Olympic Games.[8]

Gris clearly feels that any athlete who uses hypnosis is "defeating the basic premise of sport." This contention does not address the basic rationale of hypnosis in sports. First, while the athlete should always participate in sports for the enjoyment, he also should always want to perform up to his potential. Hypnosis can be a tremendous assistance in this respect and should be utilized, therefore, by the athlete. Furthermore, any athlete wants *good competition*. He usually prefers that his opponent play his best—even if the other guy wins, and even if hypnosis is what helped make him play well. The opponent's strong showing raises the performance of each participant, at least in the long run. As most athletes know, you only get better by competing against tough opponents.

Gris's statement further implies that hypnosis can guarantee victory (when he says "if one man has been hypnotized to win a bout..."). This is an assumption that has little going for it. What happens when Ken Norton or some East German or Soviet boxer uses hypnosis but gets knocked out instead? I seriously doubt that such a losing performance can be classified as one "defeating the basic premise of sport."

I have never been under the impression that "the tradition of the Olympic Games" forbids the use of hypnosis by athletes, as Gris suggests. If so, perhaps weight lifter Russ Knipp of the United States should have been banned from competing in the 1972 Munich Olympics. Knipp used self-hypnosis throughout his competitive days, setting nine world records and 34 national records along the way; he also used self-hypnosis during the '72 Olympics (see Weightlifting chapter). But, Gris does not complain about U.S. athletes who use hypnosis, though maybe he would if he were aware of the fact. He lambastes the Soviets in any case.

Gris predicted to the press in 1978 that in the 1980 Moscow Olympics the Soviet athletes "will

appear to be totally normal. You will never recognize the fact they have been hypnotized.” All I can say about this statement is this: especially whenever Soviet athletes *lose* (as happened to the Soviet hockey team against the U.S. hockey team in the 1980 Winter Olympics), no way will you be able to “recognize the fact they have been hypnotized.”

In all of Gris’s comments he leads you believe that the 1980 Soviet Olympic team members would be using hypnosis, but he provides no supporting evidence. So, how did the Soviet athletes perform in the 1980 Moscow Olympics? They won 80 gold medals, 197 medals overall; finishing in second place were the East Germans, who won 47 gold medals, 126 medals overall. These accomplishments under normal circumstances would be considered spectacular; but, because of the Soviet Union’s invasion of Afghanistan, the U.S. and 57 other nations boycotted the Olympics. The results, therefore, are hard to evaluate, and certainly cannot be attributable to a hypothesized use of hypnosis by the Soviet athletes. In the ’84 Games with the conditions reversed—that is, with the Soviet Union and most Eastern European nations boycotting the ’84 Olympics—the U.S. won a record 83 gold medals, 174 medals overall. Again, given the special circumstances, one would be naive to credit an increased use of mental training by U.S. athletes as being responsible for their bountiful gold medal harvest. So many other factors—such as, the absence of competition, the home field advantage, etc.—have to be accounted for first before one can even attempt to weigh the impact of mental training on the athletes’ performances.

Discounting Gris and Dick’s apparent anti-mental training bias, they did uncover good information on Soviet research in hypnosis. For example, they interviewed a noted expert on hypnosis, Dr. Vladimir Raikov of the Moscow Psychoneurological Clinic. Raikov conducts classes in hypnosis. His students—some of them chess players—come from all walks of life. Though chess is unquestionably a mentally demanding game, Dr. Raikov has demonstrated that with the assistance of hypnosis players can handle the pressures of the game. According to Gris and Dick, Raikov introduced one of his students to the Russian Grand Master Mikhail Tal: “Awed at meeting someone of Tal’s fame, the student could hardly talk. Raikov suggested the student play three games with the grand master. Ruffled and fidgety, he sat down across the chess board from Tal and was soundly thrashed.”[9] They played two more games; the same thing happened. After the third game “Raikov took the student into another room and hypnotized him. He induced him to think he was the late American champion Paul Morphy, then led him back to where Tal was still seated at the chessboard.”[10] Contrary to what you might think, the student did not defeat Tal; but, he vastly improved his play:

Tal was amazed... They played three more games. “Now he was expansive, brimming with energy and imagination, daring and at times brilliant. He was immeasurably better. He acted as if he really believed he was Morphy,” Tal said afterwards. The grand master still won two games, but the hypnotized student managed to stalemate the third.[11]

Afterwards Dr. Raikov provided this explanation of the incident to Gris and Dick, commenting, “Under hypnosis a person’s level of aspiration increases. He is sure he is capable of doing the work achieved by anyone else, Repin, Raphael, Rachmaninoff, or any other famous person you want to name.”[12] We must observe that Dr. Raikov does not promise hypnosis will provide a victory; instead, he merely states that it raises one’s level of aspiration. Even so, striving for, let alone achieving, this higher level can make the difference between victory and defeat, assuming the competitors are evenly matched.

Hypnosis also seems to have played an important role in a controversial championship chess match involving two Russian grand masters. In October, 1978 Anatoly Karpov narrowly defeated Viktor Korchnoi for the world chess title. Korchnoi, a Soviet defector, bitterly complained that he lost because of the activities of a Soviet parapsychologist, Vladimir Zoukhar, working for Karpov.

Korchnoi contended that Zoukhar directed interfering brain waves at him during the deciding game. Before this final game both Karpov and Korchnoi had won five games; whoever scored the next victory gained the title. Interestingly, Korchnoi had once trailed 5 to 2. Approximately at that point Korchnoi began practicing yoga and meditation.

As reported in an October, 1978 *L.A. Times* article, Korchnoi engaged in "yoga exercises and meditation sessions with the Americans, Stephen M. Dwyer of Wichita, Kansas, and Victoria Sheppard of Maryland, and he said it was a big factor in his comeback." [13] The yoga and meditation, however, could not prevent Korchnoi from becoming upset when Zoukhar showed up for the final game. An October 19, 1978 *UPI* report describes what happened:

Korchnoi protested Zoukhar's presence in the chess hall in Baguio, Philippines, and the Soviets agreed to remove him from the front row and put him in the balcony. But during the last game Tuesday, Zoukhar could be seen with his head buried in his hands, deep in concentration, near the front.

Whether the "mind-bending" really affected Korchnoi was not the point, observers said. The challenger believed Zoukhar could interfere with his concentration, so for all practical purposes Zoukhar did. [14]

In other words, perhaps Korchnoi psyched himself out by worrying about Zoukhar's presence. This seems a more reasonable explanation for what occurred than the alternative: that Zoukhar possesses parapsychological powers, and used them to upset Korchnoi's thought processes. Whichever explanation is correct, it is quite possible Zoukhar served as Karpov's hypnotist during the competition; for we read in the *Times* article that "Karpov credited the parapsychologist, Vladimir Zoukhar, with helping him, but declined to give details. 'He helped overcome the types of nervous pressures that crop up in this kind of match,' Karpov said." It is rational to assume that Zoukhar hypnotized Karpov, and gave him confidence-building suggestions. Such suggestions could dispel the match pressures Karpov mentioned. At the same time we can understand why Karpov would not want to admit he had been hypnotized: he did not want to lend credibility to Korchnoi's charges, and fuel the controversy further.

Again, here is an instance where the inference can be made that a top Soviet chess player used hypnosis on his way to winning a world championship. We do not know for sure, however, because we do not possess all the facts. In any case, a 6-5 decision is no runaway victory. If Karpov used hypnosis, and hypnosis is supposed to ensure swift victory as some people mistakenly believe, why didn't Karpov close out the match when he was leading Korchnoi, 5-2?

We recall Russ Knipp's remark that "every Russian Olympic athlete takes classes in hypnosis," and that Knipp learned this from talking to the Soviet athletes (see Weightlifting chapter). This comment was made in late 1977, not long before Soviet scientist P. M. Kasyanik published interesting information about USSR weight lifters and their minimal use of "psychological tuning." Kasyanik stated this in 1978:

A survey of 52 top lifters showed that most (96%) attach critical importance to psychological tuning before lifting. Nevertheless, only 10% of them are taught methods of tuning and utilize them in workouts. [15]

While Knipp may be correct in contending that all Soviet *Olympic* team members "take classes in hypnosis," certainly hypnosis was not universally employed by top Soviet weight lifters during the 1970s. In fact, the "psychological tuning" Kasyanik talks about resembles visualization more than hypnosis, and even at that he found only 1 out of 10 lifters utilizing "methods of tuning" in their workouts. What this indicates is that, assuming Knipp is correct and the situation described by Kasyanik still prevails, if a Soviet athlete is good enough to make his country's Olympic squad, he will be taught hypnosis; and if not, no special effort will be made to teach him hypnosis,

“psychological tuning,” or any other mental discipline.

There is no question that the 1970s witnessed much research in the area of mental training strategies by Soviet scientists. Some of these scientists’ studies are particularly noteworthy. For example, E. I. Gamal took a group of wrestlers, and played what may be called a hypnosis tape to them as they went to sleep at night. Gamal relates his experiment and the results:

Sixteen young competitive wrestlers took part in this study. The experimental group was composed of two sub-groups: (a) those who were not sure of their good physical preparation for competition, and (b) those who possessed poor “obstacle readiness” in relation to unfavorable external and internal influences. The experiment took place at the end of the preparatory and during the competitive period, during the night when they were going to sleep. A taped lesson was played to the subjects as they slept. At the beginning of the tape, to help ensure more rapid falling asleep, there was monotonous, quiet music for 15-20 minutes. The lesson then began and included material relative to how well prepared they were, that their opponents were weaker, both physically and technically, and they must wrestle with confidence, carry out their moves and combinations freely as in practice, take the initiative right from the beginning and hold it to the end, and that it is necessary to fight only for first place.

The length of the sessions varied, depending upon the subject and the period of preparation. There were a sufficient number of lessons to show a positive effect. It was concluded that the psycho-prophylactic method applied during sleep is wholly effective; however, the small number of observations do not allow for a final conclusion.[16]

We do not know to what extent Soviet coaches and athletes have adopted this method of programming the subconscious and conscious mind. But, Gamal concluded that listening to specially prepared hypnosis tapes while one is entering the sleeping state is “wholly effective” in improving one’s athletic performance. So, if Soviet coaches and athletes have not yet picked up on this approach, maybe we should. In doing so we would hardly be exploring uncharted territory, for champion athletes mentioned throughout this book have performed similar mental training while drifting to sleep (refer to the experiences of Muhammad Ali, Mark Spitz, Russ Knipp, among others).

Soviet sports psychologists also spent much time during the 1970s researching a psycho-physiological process called “psychical self-regulation” (PSR). Basically, this process involves learning how to voluntarily control what normally are involuntary bodily functions—heart rate, temperature, muscle tension, emotional reactions to stress, etc. PSR therefore is what Canadian canoe champion Bill Griffith can be said to have employed after he mastered Triple Imagery, a mental rehearsal technique promoted by Bennett and Pravitz (see Amateur Athletes chapter). Mike Spino and James Hickman, writing in the March, 1977 issue of *Runner’s World*, presented one of the first reports about Soviet research in PSR. After relating that “in 1973 a conference on PSR was conducted in Alma-Ata, USSR,” Spino and Hickman noted this:

Thirty-five papers pertaining to athletic-related subjects were presented. Researchers reported their use of techniques to augment the physical training of fencers, gymnasts, basketball players, weight lifters, divers and figure skaters, among others.

The PSR was reported effective in preventing “pre-start fever,” training for specific movements, increasing perception and reaction time, stabilizing movement, and decreasing sensitivity to pain.[17]

It should be evident that psychical self-regulation accomplishes what self-hypnosis and, as Bill Griffith’s experience shows, imagery can do; that is, athletes properly employing self-hypnosis

and imagery can also attain decreased sensitivity to pain, increased perception, elimination of “pre-start fever,” etc. Examples of these benefits, produced by “different” techniques, appear elsewhere in this book, illustrating again how meaningless it often is to assign a name to a mental discipline; for what is “psychical self-regulation” to one athlete is “imagery” or “self-hypnosis” to another.[18]

The late 1970s saw Soviet sports psychology research and thought rapidly evolve, becoming extremely sophisticated at times; two striking examples of this require our attention. The first example we shall examine is a highly advanced experiment involving long jumpers and triple jumpers; this was conducted in 1978 by B. Blumenstein and N. Hudanov, and reported in the March, 1980 issue of *Soviet Sports Review*. Blumenstein and Hudanov, after talking to athletes and observing them in competition, identified four types of *individual style* commonly found in sports participants. The term “individual style” was defined by the two scientists to be “a specific system of inter-connected purposeful modes of behavior, conditioned by nervous system characteristics, by which people who have different characteristics achieve equally high results in activities.”[19] According to Blumenstein and Hudanov, one of two styles—“steady” or “explosive”—can describe the athlete’s *emotional regulation* of his activity (activity referring to the workout or competition). Also, one of two styles—“internal” or “external”—can describe the athlete’s *orientation* to his activity. The two researchers elaborate on these styles:

“Steady” indicates performance at a relatively steady emotional level. A stable background of excitation is maintained throughout the competition. Attainment of one’s personal best does not depend on strategy and is not linked with use of risky tactical-technical actions.

The “explosive” type is characterized by sharp emotional lifts and peaks of emotional excitation prior to competition. The athlete does not execute all jumps at maximum power because the level of excitability after a successful jump is reduced, and a temporary pause for recovery and reactivation of neuro-muscular readiness is necessary. Attainment of one’s personal best is dependent on strategy and is linked with use of risky tactical-technical actions.

In the case of “internal” orientation, the athlete displays maximum concentration when switching attention from external objects and situations to his own internal state. Prior to an attempt he uses ideomotor images to activate conditioned reflex programs.

An “external” orientation is distinguished by the fact that the athlete follows the behavior of his main competitors and uses different tactics of psychological influence on them (strong trial jumps, demonstration of his readiness, personal contacts). One’s competitive result often depends on the competitors, external conditions, and purposes (to defeat a specific person).[20]

What Blumenstein and Hudanov uncovered was that with “top-class jumpers, the ‘explosive’ type of emotion is more dominant than ‘steady,’ and ‘internal’ orientation is more dominant than ‘external.’” These jumpers raised their level of emotional excitement, said the scientists, “to coincide with execution of the jump” (the “explosive” part of their individual style), while the athletes’ “internal” orientation facilitated their jumping just as well in competition as they had in practice. (“Jumpers must reproduce performances that have been achieved in workouts,” note the two researchers, and “internal” style jumpers can best do this because of their reliance on “ideomotor images to activate conditioned reflex programs.”) Having presented this information, Blumenstein and Hudanov next emphasize four points:

- 1) A definite individual style should be formed long before crucial competition.
- 2) The coach identify his protege’s psychological characteristics (temperament,

character and behavior during workouts and competition).

3) (The coach should) note corrective actions that should be introduced when planning psychological preparation to develop and form an individual style.

4) (The coach should) define means of achieving this goal.

Blumenstein and Hudanov then offer six ways the coach can develop and sharpen his athlete's individual style in the area of emotional regulation. These ways include such staples as massage and appropriate warm-up exercises, but also, as the scientists relate, the following psychological methods:

Autogenic training ("calming" when forming the "steady" type; "mobilization" when forming the "explosive" type).

Breathing exercises (slowing down breathing in the former case; speeding up, in the latter).[21]

In the area of orientation ("internal" or "external") four methods are proposed for the coach to shape his athlete's individual style. One of these methods is special breathing exercises, while another corresponds very closely to self-hypnosis, it being:

Voluntary switching of attention to different emotional stimuli (with the help of self-commands — "to concentrate"; self-calming — "all is O.K.", "be calm"; self-encouragement — "well done" and so on).[22]

The self-commands, self-encouragement, etc. the athlete is to give himself are essentially auto-suggestions. Though the word "self-hypnosis" is not used, it appears that this mental training strategy is employed here. For all this to occur, however, the athlete would first need to be taught self-hypnosis, and then guided in its application—with the coach serving as the instructor and overseer, if Blumenstein and Hudanov could have their way. In fact, it appears that something of this sort was tried out in the experiment conducted by the two researchers. They relate the stories of a long jumper and triple jumper, both remaining unidentified, who benefitted substantially from efforts to create an individual style suitable to each athlete's personality. The case of the long jumper was reported as follows:

Long jumper V. (best performance, 7.08 meters) does not always relate consciously to training, is insufficiently motivated (does not always "burn with desire" to participate in competition), is distinguished by emotional stability, is composed, calm, even somewhat phlegmatic, is disciplined, but has a fairly low level of self-regulation in sports activity. He utilizes a mixed warm-up.

Considering this athlete's individual characteristics, it was recommended that he develop a "steady" style with an "internal" orientation. It was suggested that he increase his behavioral self-control and self-regulation in sports activity. The coach was advised to control his protege more outside of training sessions and to set definite, clear goals before him. The warm-up remained the same.

The recommendations were put into practice over the course of nine competitions. The athlete was taught methods of autogenic training. Special breathing exercises, psychological methods (self-commands, self-encouragement, etc.) and voluntary changes in content of thoughts were utilized. A personal record of 7.47 meters was set.[23]

Though Blumenstein and Hudanov found top-class jumpers to be mainly "explosive-internal" types, observe that they did not advise this particular style for Long jumper V. Instead, based on V's personality, the two scientists felt he would perform best if he developed a "steady-internal" individual style (and V came through with a personal record). So, what Blumenstein and Hudanov want us to realize is that the athlete's personality needs to be clearly understood by the coach

before work is initiated on developing the athlete's individual style; no one style works for all jumpers, let alone for all athletes.

We also see in V's experience that he was taught autogenic training, and employed "psychological methods," which is another name for autosuggestions. Based on his apparent thorough involvement in the project, the coach presumably guided the athlete in all this.

Three major points emerge from the two scientists' experiment:

- 1) Each athlete possesses a unique personality which the coach needs to understand.
- 2) Developing and perfecting an appropriate individual style for the athlete will result in improved performances.
- 3) Mental training can help in developing a suitable style for the athlete; application of "psychological methods" during workouts and competition is strongly advised.

Too often mental training is conducted on athletes in a "blanket" fashion, meaning that the individuality of each athlete is not taken into consideration by the coach or sports psychologist. This "blanket" approach is resorted to all the time because it is "convenient" and "cost-effective." When the whole team can be led through a visualization exercise at once, or can be hypnotized all at once, having someone work with each athlete on an individual basis is regarded by many coaches and upper management (in the case of professional teams) as a waste of time and money. The misconception that when a mental rehearsal technique works for one athlete, it will work for another, arises frequently; we see this whenever an athlete is brought in and subjected, "blanket" fashion, to the same mental training a teammate underwent. When the latter's future performances show no improvement, however, it only illustrates the point that a chosen or favored mental training strategy does not work equally well, nor is applicable, for all people. This is the message Blumenstein and Hudanov stress in their conclusion when they call for "an individual plan of action," tailored to the personality of the athlete. They continue:

This is possible only by engaging in systematic psychological training. The characteristics of individual style (mental self-regulation) must be considered. A harmonious combination of individual personality characteristics and individual style of activity is important for effective and consistent performances.[24]

Our second example of an advanced Soviet work in the area of sports psychology which made itself known during the late 1970s is found in the paper, "Contemporary Psychological Preparation of Athletes," by G. D. Gorbunov; revealing thinking of the highest order, this paper was first published in 1979 in the journal, *Teoriya i Praktika Fizicheskoi Kultury*, 12:5-7. In this work Gorbunov attempts, as he describes it, "to provide an understanding (based on theory) of the practical experiences associated with the psychological preparation of an athlete." [25] Preparing the athlete psychologically involves much more than meets the eye, notes the scientist. For starters he says that "one can distinguish three forms of psychological preparation." They are:

- 1) Psychological preparation of the athlete for an extended period of strenuous training;
- 2) The overall psychological preparation of an athlete for competition in general;
- 3) Psychological preparation for a specific competition.[26]

With respect to psychological preparation for extended, strenuous training, Gorbunov discusses at length the importance of motivating the athlete, and how to accomplish this. He next talks about instilling in the athlete "attitudes favorable to sports training." This can turn into a real battle, states Gorbunov, because "while an athlete may be functionally ready to take on a heavy training schedule, he is often not psychologically ready for it." How do we know when an athlete is not psychologically ready for his workout? Informs Gorbunov:

The specific psychological rejection of the physical load is expressed in the athlete's fear that he cannot endure the loads or will not be able to recuperate for the regular training sessions or compete after the additional load.[27]

Later on, in his section on psychological preparation for competition in general, Gorbunov reveals how the coach or sports psychologist can deal with the athlete's various hang-ups:

In practice, educational work with athletes has shown that it is both valid and effective to use the many tools of a neurosis clinic to probe smoothly and correctly into the subconscious levels which control an individual's attitudes and behavior. Standardized, oft-repeated suggestion, supplemented by organized instruction in autosuggestion techniques, permits corrections to be made in an athlete's attitudes about competition, about competitive results (both planned and unconsciously desired results), about the social value of activities during competitions, about the possible consequences of one's performance in competition, and so on. This type of preparatory effort has a controlling effect on the conscious in the emotional, precompetitive environment which is even more effective because it reduces the negative counteractivity of the subconscious.[28]

Hopefully, rapport will be sufficiently established between the athlete and coach or sports psychologist so that the athlete feels no inhibition in allowing "tools of a neurosis clinic" to be used on him. The alternative—well, according to Gorbunov, there really is no good alternative to mental training. Athletes possessing counterproductive attitudes are unlikely to be helped by typical coaching approaches, he contends:

The traditional methods of sports education, oriented toward just the athlete's consciousness, are either partially or totally ineffective when dealing with his individual or typological peculiarities. Even a complete understanding of the harm that comes from precompetition anxieties will not enable an athlete to handle a bad prestart state.[29]

Traditional methods of coaching (sports education), because they only address the athlete's conscious state, are unlikely to evoke opposition from the athlete or controversy in general. Unfortunately, such old-time methods are less likely to produce results than ones that work on both the subconscious and conscious levels of the athlete's mind. The decision to employ "tools of a neurosis clinic" will require the coach and sports psychologist to expend extra effort in educating the athlete and gaining his trust. The athlete may refuse to partake in mental training, in which case the coach only finds himself back to where he would have been had he never promoted the idea. However, if the athlete gives the go-ahead to mental training—to such things as "organized instruction in autosuggestion techniques"—substantial improvements in performance will be the likely outcome.

One other comment by Gorbunov warrants our consideration. In his section on psychological preparation for a specific competition, he discusses the ideal make-up of precompetition goals, and when the athlete should "actualize" these goals:

The most important goal in the precompetition period is not the result of the event, but rather the process by which the result is achieved. It includes the goals of good effort, of what to do, how to do it, and when to do it. It is best to actualize the goals only in the last few minutes and, in some cases, seconds before the start.[30]

Gorbunov's suggestion for athletes "to actualize the goals only in the last few minutes and, in some cases, seconds before the start" mirrors the actions taken by athletes reported on elsewhere in this book. For example, Dr. Suinn's remark that Nordic skier Bill Koch "visualized his forthcoming race in less than a minute, while waiting near the starting gate" comes to mind (Koch won the silver medal in this race). Also, the "it's your time now" autosuggestion—Blumenstein and Hudanov would call this self-encouragement—figure skater David Santee gave himself while

skating onto the ice just before a performance falls under this same category. Certainly it is possible—and perhaps the best time, as Gorbunov contends—to wait until the last minute or last second to “actualize” goals; but, one must be careful about the logistics of the operation. One must be sure to allocate enough time to carry out the plan; distractions should be avoided or compensated for as well. If these pitfalls—lack of time, and distractions—are surmounted, an athlete following Gorbunov’s strategy should perform quite well, because he has also been regularly engaging in hypnosis sessions during training.

Although, as the papers by Blumenstein, Hudanov, and Gorbunov show, Soviet scientists during the 1970s researched in detail certain facets of mental training for athletes, that is a far cry from demonstrating conclusively that all Soviet Olympic team members at the time were taught and used hypnosis. It is a long road from research to widespread application.

To try to shed more light on this possible anomaly between experimentation and use, I interviewed two top Soviet athletes. The first I managed to track down was Alex Metreveli, the top-ranked tennis player in the Soviet Union during the 1970s, and who still competes actively in senior tennis tournaments. I talked to him July 17, 1977. Obviously a fine player, Metreveli lost in the finals at Wimbledon in 1973, and is a four-time European amateur champion as well as ten-time Soviet champion. Metreveli’s been around, and if hypnosis is used by athletes in his country, one thinks he might know about it.

I first asked Metreveli what type of mental preparation he engages in before a big match. He answered, “I like to have a good practice the day before. And I like to maybe, you know, to see a good movie or just read a good book.” Metreveli admitted that the mental side of tennis has become increasingly important:

Now, especially in the men’s tennis, we have very hard competition. Too many good players we have in tennis. Everybody knows how to play tennis, and everybody’s playing well. So, you have to special prepare for the matches.

I wondered if Metreveli’s special preparation incorporated hypnosis, so I inquired along these lines. “I was wondering,” I said, “have you ever tried self-hypnosis?” to which Metreveli laughingly replied, “I never tried, and I never heard about it.” I persisted in my attempt to find some trace of Soviet athletes using hypnosis:

Stevenson: How about other Soviet athletes, like in track and field? Do you know anything about them?

Metreveli: No. I just told you. I told you I didn’t hear anything about hypnosis in the sport—especially in our country. Because, just as I was talking before. You need to prepare yourself for the game. Maybe it’s a couple of different ways; but, still I don’t think it’s hypnosis. You have to concentrate; you have to prepare yourself. It’s probably your own way.

Stevenson: So, your coaches have never encouraged its use?

Metreveli: No. No.

As I have learned that most tennis players know very little about hypnosis, the response by Metreveli was not surprising. From the nature of his answers, typical of a tennis player, I seriously doubt he was “covering up” anything.

On the other hand, is hypnosis a “forbidden subject” for Soviet athletes to discuss? The evidence is hardly convincing that it is. Soviet athletes, we recall, spoke freely on the subject to Russ Knipp, telling him about their use of hypnosis. Nonetheless, it is a good question, and leads us straight to the central issue—the Soviet athletes’ “tight-lipped” reputation. One American expert in U.S.-Soviet sports exchanges is Dr. Michael Yessis, editor of the excellent quarterly journal,

the *Soviet Sports Review*.[31] Dr. Yessis considers this “tight-lipped” reputation of Soviet athletes very ill-deserved. His insights on this subject are contained in an illuminating article, penned by Leslie Maslakov, appearing in the February 22, 1979 *Santa Ana Register*. We particularly note this segment of Maslakov’s report:

Soviet athletes are reputed to be tight-lipped when it comes to discussing the training techniques that have made them the world leaders in many sports.

Cal State Fullerton professor, Dr. Michael Yessis, however, claims their silence is not orchestrated—on the contrary, they are eager to tell what they’ve learned and learn our techniques as well. A lack of knowledgeable interpreters is the problem, he says.[32]

Dr. Yessis speaks fluent Russian, and serves, whenever he can, as an interpreter for Soviet athletes when they compete in the United States. According to Dr. Yessis, Soviet coaches expertly apply principles of biomechanics (the study of physical movement) in the training of their athletes. “The Russians,” Dr. Yessis told Maslakov, “are very much ahead of us in terms of knowledge of how to really train athletes. We turn out good athletes not because of our coaches but in spite of them.” This fact could in part explain why a Soviet athlete might appear to be “tight-lipped”: American training techniques are too backward to provide him any benefit. So, the Soviet athlete might simply keep to himself and just concentrate on performing well while competing in the U.S. As Dr. Yessis pointed out, “The Russians would like to know what we’re doing, they don’t come here to learn too much, because through the years they’ve found we don’t know too much.”[33]

The other Soviet athlete I interviewed was Janis Donins. In 1971 Donins was the number two javelin thrower in the world, with an official mark of 293 feet. A member of the Soviet Olympic team, Donins ran into trouble with the authorities when he married an American girl. In 1975 he was allowed to emigrate, and settled in California, working as a sports consultant. This changed circumstance in Donins’ life eliminated any reluctance he might have had in discussing certain subjects. Being a free man, he could say whatever he wanted.

Donins expressed keen interest in my mental training book project, especially because during his competitive days he had learned yoga on his own. He almost regretted not being able to confirm any of the stories about all the Soviet Olympic athletes supposedly using hypnosis. As far as he knew, up to 1975 such reports were myths; of course, he added, the situation may have changed since then. Despite not being able to lend weight to the reports, Donins realizes that hypnosis can greatly help most athletes; for this reason he would like to see widespread practice of this mental discipline by sports participants..

In the interview Donins cleared up many misconceptions about Soviet athletes, and I found his remarks quite enlightening. What Donins said is not necessarily the final word on what mental training, if any, Soviet Olympic athletes underwent during the 1970s, but it is a definitive commentary.

The Janis Donins Interview — February 26, 1979

Bob Stevenson: William Kroger, in his book *Clinical and Experimental Hypnosis*, says there’s an institute in Kharkov which conducts classes for coaches on psychological techniques. Supposedly, these psychological techniques are to be taught to Soviet athletes for use in the 1980 Olympics. Do you know anything about this institute?

Janis Donins: As far I know, I never heard about such an institute. Maybe this institute has recently established this course; but, up to 1975 I didn’t hear about such an institute.

Stevenson: So, you probably did not hear about what Kroger states about these psychological techniques: they were first employed on the Soviet bicycling team with great success during the 1972 Olympic Games—the bicycling team winning a gold medal.

Donins: It could have been applied for the bicycling team. But, I was on the track and field team then. They didn't have such an experiment made on us.

Stevenson: You weren't aware of any psychological techniques the bicycling team used?

Donins: No.

Stevenson: Well, Russ Knipp, in my interview with him, said that David Rigert practices self-hypnosis all the time. What do you know about Rigert using self-hypnosis?

Donins: Well, I would say weightlifting certainly requires a particular degree of concentration for one whole movement. I wouldn't be surprised if guys did certain research in this area, and that David Rigert used some type of self-hypnosis.

Stevenson: Knipp claims that *every* Russian Olympic athlete takes classes in hypnosis.

Donins: (Chuckles) I would say, without offending Russ, with me, former Olympic team member, I never ever heard about such classes.

Stevenson: As I understand it, you were once #2 in the world in the javelin—in 1971. And, you were active in the Soviet track and field program up to 1975.

Donins: Yes, and I constantly participated in almost all nations' track clinics and training camps. I must say I really didn't hear particular emphasis on hypnosis or self-hypnosis. As far as I know, those approaches, if they were used, were employed and developed by individual athletes.

Stevenson: You mentioned that during your competitive days you practiced yoga.

Donins: Right. I tried yoga without a very definite purpose. I was appealed by certain aspects of yoga, like breathing. I considered breathing one of the most important functions. I felt I needed to develop some degree of self-awareness. I read in books I found myself—nobody gave me those books—that right breathing helps to develop certain self-control and relaxation degree. I thought it would be helpful in my athletic activities.

Stevenson: Was it helpful?

Donins: It was helpful because at certain times I had to relax, taking into consideration the fact that the workouts were very strenuous. I discovered that no massage or other things helped me very much to relax.

Stevenson: Did your distances improve during this period?

Donins: I wouldn't say my distances improved just because of yoga; but, perhaps. Somehow—accidentally maybe—it gave some kind of input, because it helped me to develop a certain amount of self-awareness.

Stevenson: Authors Henry Gris and William Dick, in *The New Soviet Psychic Discoveries*, talk about a Dr. Pavel Bul, a Leningrad hypnotist at the Pavlov Medical Institute. He's worked with a boxer, giving him hypnotic suggestions. Are you familiar with Dr. Bul and his work?

Donins: I'm not familiar with Bul's works; but, I could assume that in some physical educational institute or university there have been done some experiments. But, I don't believe they were done with the top athletes, with the Olympic team athletes. Maybe there are some researchers working with average athletes who have done certain experiments. But, as far as I know, it's not yet been applied for the world class athletes. Maybe for the bicycle team some kind of hypnosis was used; but, was it the main reason why they won those Olympic gold medals? I would allow myself doubt. But certainly, it could be very helpful.

Stevenson: I talked to Alex Metreveli. He claimed he knew nothing about hypnosis as far as his own use, and also other Soviet athletes using it. Is hypnosis a subject Soviet athletes are permitted to discuss with foreigners?

Donins: Certainly they can discuss with foreigners this kind of experience if they had it; and, they can discuss it if it's not (chuckles) "top secret" for this particular athlete, or if he feels it's not something forbidden. Basically, Soviet athletes don't have anything to hide. There are exchange programs, and these athletes are well known around the world. I would say Eastern European athletes—except East Germans—are usually very open. I know that Finnish and Soviet athletes, we had many meetings together. We talked about different types of workouts—not only talked, we argued, tried to prove our points. This was very helpful in the long run.

Stevenson: You've been to the U.S. Olympic Training Camp in Colorado Springs and witnessed an autogenic training session, which is similar to self-hypnosis. Could you tell us about that?

Donins: I saw certain attempts to explain to athletes how they could handle themselves in psychological aspects, how a psychological approach could be helpful in improving their results. It's a good idea that, at last, people here are paying attention to certain hidden powers, and utilizing their training period better than just having actual workout. Actual workout is not the only thing. There should be some insight of self.

Stevenson: Do you think that the autogenic training session was helpful?

Donins: For the athletes who never heard about such things like that, certainly it was helpful. The athletes should have such types of lectures and discussions, and they should be applied **practically**. They should be applied practically, not just only one day, but they should be applied continually, **every day**.

Stevenson: In other words, athletes should use autogenic training or self-hypnosis for workouts.

Donins: They should use it **regularly**. And then it would bring some kind of results. It doesn't happen overnight.

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1980s

Janis Donins' testimony shows that through the mid-1970s no "mental training gap" could be said to exist which favored Soviet track and field athletes over their U.S. counterparts. Nonetheless, the 1980s, perhaps for better reasons, saw no let-up in charges that an overall "mental training gap" existed. For example, Dr. Gregory Raiport, a sports psychologist who worked with the 1976 Soviet Olympic team before defecting to the U.S. in 1977, stated this in 1984 to the press: "The United States is way behind the Soviet Union; people know very little about sports psychology in the U.S.A. Athletes are not well educated and coaches resist it." [34] Explaining why, in his opinion, the U.S. was "way behind" the USSR in the area of sports psychology, Dr. Raiport continued, "I think ignorance is the main reason. They (the U.S. coaches) think, erroneously, that I am a challenge to them, that I'd go over their heads. I'm here to help the coach." [35]

Dr. Yessis echoes Dr. Raiport's sentiments, and estimates that in the area of applied sports psychology the U.S. remains seven years behind the Soviet Union. In a 1983 interview with Beth Ann Krier of the *L.A. Times* Dr. Yessis observed, "What they (the Soviets) are doing at this moment with their top athletes you'll never find out, but it will be published in a couple of years. But we're still five years behind what we read about." [36] The question that arises from the comments of Dr. Raiport and Dr. Yessis is: what is it exactly that the U.S. sports program is behind in?

According to Dr. Yessis, the big difference is that the Soviets “are integrating all the (sports) sciences into one,” whereas the U.S. is not. He informs us:

They [the Soviets] found out that your best biomechanical (technique analysis) studies are no good unless you have the physiological data and the psychological data to go along with it. Their scientists are all working together.

They've also found that the elite athlete is so different from an athlete, say, two steps below him that the research they were doing on good athletes didn't hold water with the elite athletes. They've found out that the psychological state of the elite athlete is so different from that of other athletes that it affects the physiological and biomechanical functions, which are also different.[37]

Not only have Soviet coaches and sports psychologists apparently taken into account the fact that the psychological make-up of elite athletes differs enormously from that of good athletes, but also they are said to use personality tests to channel athletes into sports they are most suited for. Soviet athletes are first administered a personality test, says Dr. Raiport, “then you compare his personality with the ideal personality for a particular sport.” Raiport reveals why this comparison is important:

You need a different personality to be a boxer, in weight lifter or a marathon runner. A weight lifter needs an explosive personality; he discharges a tremendous amount of energy in a short period of time. So do sprinters. But marathon runners need stamina and archers and shooters need stability. They must turn to stone.[38]

Having found an athlete who possesses or shows promise to developing an ideal sport-specific personality—“explosive,” for instance—Soviet coaches and sports psychologists supposedly direct him to a sport requiring an abundance of that particular trait.

U.S. coaches and sports psychologists, by contrast, tend to adopt a go-it-alone approach in their work with athletes. Paraphrasing an assertion made by Dr. Yessis, Beth Ann Krier reported that “American researchers rarely work together or coordinate their research and coaches are unlikely to share information with each other because they're also competing against each other in national competitions.”[39] Assuming this analysis is correct, it can be inferred that most American coaches and sports psychologists are more interested in building their own little pyramids—boosting their own salaries, business, and prestige—rather than, through mutual cooperation with other coaches and mental training experts, truly serving the athlete. This is another reason why you, the athlete, should take full responsibility for your own mental training. The person who cares most about your development and success as an athlete is you yourself—not coaches or sports psychologists, whose actions often are self-serving and insensitive. Unless you do not mind others taking credit for your good performance, do not become dependent upon outsiders for your mental preparation.

Top athletes in the Soviet sports system usually allow coaches and sports psychologists to guide their mental training, but they have good cause for bestowing such trust, and not breaking away on their own. This is because, as Dr. Yessis indicates, a national goal orientation shapes the Soviet sports system, necessarily gearing it toward the athlete and his optimal development; as a result, there is little reward for Soviet coaches and sports psychologists who, harboring ambitions, do not share information and/or cooperate with one another. So, the Soviet athlete, when helped by the coach or sports psychologist, knows no ulterior motives are behind the assistance. Dr. Yessis compares the organized Soviet sports program to the backward and politicized American sports scene:

In Russia they (the coaches) don't have to worry about rivalries, recruiting or somebody stealing their ideas. Their priority is developing the high-level athlete, so every-

body has to contribute to this cause. We (in the U.S.) never even choose the best Olympic coaches in this country. Most coaches here are chosen on the basis of who do we owe a favor to. It's very sad. And most coaches in the U.S. are afraid of science.

Typically, we think that to be a coach in a particular sport you have to have played in that sport and that's the only credential you need. Soviet coaches are also well educated in the science and the psychology of sports.[40]

Dr. Yessis calls upon the U.S. to systematize its national Olympic sports program along the lines of what the Soviets have done with theirs. Short of this, he advocates that athletes at least take up mental training, saying, "You must have (mental) training and the building of confidence. 'Win one for the Gipper' is out the window now." [41] Dr. Raiport seconds this, and notes that one way an athlete can perform well consistently is to: 1) recall exactly how he felt whenever he made a great effort, and 2) use mental training to summon up that same feeling for subsequent performances. "Vasily Alexeyev," Dr. Raiport points out, "got a tingling in his jaw when he was inspired. Others may feel a coolness at the temples or an emptiness in their stomach. It varies with the individual." [42]

Valery Borzov, the outstanding Soviet sprint champion who won two gold medals in the 1972 Olympics (100m and 200m dash), used a routine similar to the one recommended by Dr. Raiport in mentally preparing himself for his races. Borzov describes at length his pre-race preparation procedure in an enlightening December, 1981 *Soviet Sports Review* article titled, "An Hour Before the Start." This article is important because it contains an Olympic champion's *first-hand* account, and it reveals his obvious application of mental disciplines (imagery and "mobilization"). Borzov first discusses his warm-up method (stretching, massage, jogging, etc.), a discussion comprising most of the testimonial. He concludes his story, significantly, by relating how he activated a desired mental state. Borzov tells us:

About nerves and one's mental state. The task is clear—to mobilize to a maximum degree and for a specific time. The difficulty is that not everyone can mobilize quickly, and being excited for a long time burns you out. . .

It is known that an individual's mental state can be changed depending on what images and pictures he reproduces in his consciousness. It is necessary to develop the ability to disassociate oneself from the world and evoke the desired images within oneself by willpower and exercising the imagination. I try to conserve my nerve energy right up to the time of going onto the track. During the warmup process I call to mind a forest and a fishing scene. This leads me to feel tranquil and discourages a feeling of bustle and hurry. But now five minutes remain until the start. I must stimulate my nerves, elevate the pulse, simulate the state that prevails during running. One must maintain the ability to control one's actions by the degree of general mobilization, not by details of technique. This can be accomplished on a foundation of anger and risk, but not fear which leads to confusion and chaos. I focus on running, "pedaling," become angry with someone or something, and stir up the thought that I am alone and that seven people are against me![43]

Borzov's commentary is quite interesting, especially when we see how it matches up with G. D. Gorbunov's discussion on psychological preparation for a specific competition. Gorbunov, we recall, remarked that "the most important goal in the precompetition period is not the result of the event, but rather the **process** by which the result is achieved." Borzov did not give himself an autosuggestion such as "to win," which would have addressed the result of the event; instead, as advocated by Gorbunov, he directed his thoughts to the process required to run well ("I focus on running, 'pedaling,'" etc.). Gorbunov also made a big point that "it is best to actualize goals only in the last few minutes and, in some cases, seconds before the start." Borzov did exactly this.

"Five minutes remain until the start," he states. "I focus on running, 'pedaling,' become angry with someone or something, and stir up the thought that I am alone and that seven people are against me!"

It is doubtful that coincidence explains Borzov's adoption of mental preparation approaches suggested by Raiport and Gorbunov. These two scientists may never have worked directly with Borzov, but clearly ideas they and other Soviet sports psychologists hold on mental training have not remained in the laboratory. The terminology used by Borzov in his article shows that he is well-versed in sports psychology, as evidenced by the fact that probably not one U.S. Olympic athlete in a hundred could compose such an informed line as this one by Borzov: "It is necessary to develop the ability to disassociate oneself from the world and evoke the desired images within oneself by willpower and exercising the imagination." Borzov's comments lead us to conclude that the Soviet sprint champion is thoroughly educated in the principles of mental training, obviously experienced in its application, and likely attained his level of mastery thanks to the input and assistance of others (sports psychologists and/or coaches trained in psychology).

As the 1980s progressed, it became harder to refute contentions that mental disciplines are widely, if not universally, employed by elite Soviet athletes. One such contention was made in 1985 by Kurt Krueger, a former swimmer at USC and now a sports psychologist. He said that "the Soviets have the best system... Eighty-three percent of their athletes who win the major events had some form of mental training." [44] Krueger did not reveal how he determined that 83%, rather than 81% or 86% or any other percent, of the Soviet champions use mental training; but after a while one begins to believe such assertions contain more truth than myth, if only for the simple reason that too many people are saying the same thing. For example, Dr. Lars-Eric Unestahl, a sports psychologist who worked closely with many of the Swedish Olympians in 1980, told me that "they (the Soviets) use hypnosis, but not for every athlete." My time with Dr. Unestahl was short, so I did not learn what he based his statement on; but, his work with the 1980 Swedish Olympic team probably enabled him to establish contacts with Soviet sports psychologists, coaches, and athletes, from whom he could derive a good idea of the type and amount of mental training performed by Soviet Olympic athletes.

And then there was the matter of the continuing Soviet sports psychology research—research one could sense was being applied, rather than remaining an academic exercise. One excellent study that had this drift to it showed Valery Borzov was not the only Soviet sprinter to have been exposed to mental training. V. Zobkov performed an experiment in 1980 on a group of adolescent sprinters. As detailed in the March, 1983 *Soviet Sports Review*, half of this group (the exact number not stated) served as the controls, receiving traditional training, while Zobkov had the other half learn and apply these four techniques:

- 1) Setting goals for a definite period (a month, a week) with active participation of the athlete in drawing up the training program and means to be used.
- 2) Devising guidelines for achieving difficult sports tasks in which athletes are informed about competitive and training results and about possible competitive conditions and opponents. (This ensures intensified preparation of athletes with low self-esteem and places emphasis on objective difficulties for athletes with high self-esteem.)
- 3) Forming correct self-assessment in training work and compiling written accounts by the athletes about previous competitions, noting their degree of agitation when getting ready for the start, the effectiveness of the warm-up, the competitive run, the difficulties arising and their success in dealing with them, evaluation of their performance, determination of the necessary training work needed in the future, and analytical discussions after competition.

4) Mastering specific ways of self-regulation in pre-start states (individualization of pre-competition warm-up, autogenic training, ideomotor “tuning-up,” and self-encouragement).[45]

Zobkov believes the goal-setting, self-assessment, and “self-regulation” (relaxation/visualization/self-hypnosis) is a must for young sprinters because only 25% of them possess the highly desirable “sport-as-work” personality trait.[46] The other 75%, notes the scientist, are motivated to participate by “personal-prestige” factors. According to Zobkov, athletes guided by this “personal-prestige” orientation possess either low self-esteem or high self-esteem. Both the low self-esteem and high self-esteem “personal-prestige” types are difficult for the coach to deal with because they display “emotional instability when in extreme situations during competition and a decrease in results, despite favorable physical data and good preparation.” After relating additional weaknesses of each type, Zobkov goes on to say that “the coach is confronted with the difficult task of forming and strengthening” the heretofore hardly existent “sport-as-work” motivation in such athletes. This task, normally impossible, can be accomplished by implementing the four techniques listed by Zobkov. The Soviet scientist states that using the four “means of developing psychological readiness for competition help form and reinforce sport-as-work motivation in adolescent sprinters” as well as generates “improvement in self-control during extreme conditions of competition.” He bases this assertion on the positive results his work with the sprinters achieved:

Half of the young athletes during the course of eighteen months of training raised their sports ranking from Class III to Class I and the rest from Class III to Class II. In the control group, where the usual training regime was followed, only half of those taking part attained a Class II rating and the rest remained at the Class III level.[47]

In the Weightlifting chapter, we became acquainted with Charles Garfield’s research about the Soviet and East German sports training programs. Garfield’s book, *Peak Performance: Mental Training Techniques of the World’s Greatest Athletes*, was published in 1984, and provides fairly good indications that most, if not all, top Soviet athletes incorporate mental rehearsal techniques into their training regimens. There are holes in the evidence, as there usually are in such matters, but what Garfield relates ties in closely with what others, such as Dr. Raipov and Dr. Yessis, maintain; so, the conclusion that elite Soviet athletes presently use mental disciplines on a regular basis appears most credible.

Some of the Soviet activity in sports psychology Garfield reports on warrant our attention. The findings of the indefatigable Vladimir Kuzmin, a Soviet sports psychologist, were presented at the Fifth World Sport Psychology Congress in Ottawa (1981). Informs Garfield in his book, “Kuzmin cited evidence gathered over twenty years, through working with more than 600 athletes, that showed the positive effects on performance when goals were visualized completely and vividly.”[48] That visualization proved beneficial for so many athletes is newsworthy because scientific studies often involve too few subjects for definite conclusions to be drawn. Of even greater interest, though, is the fact that the type of visualization performed should vary depending upon the nature of the athlete’s goals. Garfield discovered from talking to Soviet scientists that for broad, *long-term goals* “impressionistic mental imagery with many nuances of emotion is most effective;” *short-term goals*, by contrast, “are most effective when expressed as detailed, performance-oriented visualizations.”[49]

Garfield also came across a remarkable study of four matched groups of Soviet Olympians preparing for the 1980 Winter Games. The four groups carried out the following training:

- | | | |
|-----------|---|--|
| Group I | — | 100% physical training |
| Group II | — | 75% physical training; 25% mental training |
| Group III | — | 50% physical training; 50% mental training |
| Group IV | — | 25% physical training; 75% mental training |

Garfield did not state what Soviet scientist(s) conducted this study, which is too bad because the results are eye-opening. Group IV, with only 25% physical training, but **75% mental training**, outperformed the other groups. In second place came Group III, followed by Group II, with Group I—the 100% physical training bunch—in last place. The fact that this study involved athletes engaged in winter sports reminds us of Corky Fowler, co-author of *The Hidden Skier*, and his pro-visualization testimonial (see Amateur Athletes chapter):

I've been mentally practicing my skiing during the summers for years. On the first day of each ski season, I ski as well as I did on the last day of the past season . . . [50]

Top priority in winter sports, such as skiing and figure skating, is the mastery of advanced skills, rather than the attainment of super physical condition. To master such skills one must embed in his mind the proper steps and movements, plus timing factors, required for success. This embedding process is one area where mental training can really help, as the experience of Fowler and Group IV illustrates.

Having performed this study on 1980 Winter Olympians, one wonders if the results encouraged Soviet coaches to set up Group IV-type training regimens for athletes making the Soviet Summer Olympic team. This we do not learn from Garfield. Nonetheless this is the type of study that, under present circumstances, is unlikely to be tried out on U.S. Olympic team members, mainly because of lack of cooperation problems (amongst everyone involved). The study, it can be said, represents a sign of strength on the part of sports psychologists operating within the Soviet system. The scientists probably wanted to demonstrate in as convincing a manner as possible, the efficacy of mental training, especially as it pertains to elite athletes. They also undoubtedly felt assured that those athletes showing the least improvement (Group I) would, after the experiment, be able to quickly catch up to their colleagues—thanks to reintroduction of mental disciplines into their training regimens. So, to Soviet sports psychologists this experiment entailed little downside risk. Of course, this is conjecture on my part. Still, it can be seen that conducting a study of this sort on one's Olympic athletes—the nation's best—requires broad recognition of the potential rewards and applications, as well as supreme confidence in how the study will turn out. Only a coaching staff well-educated in the advantages of mental training would permit such an experiment to be undertaken.

That the coaches of the top Soviet athletes are well-familiar with mental training, if not psychologists themselves (see Medvedev's remark in Weightlifting chapter), is evidenced by several comments of Garfield. He states, for example:

Whereas the sports psychologist in this country [U.S.] may be perceived as a person who helps the athlete correct problems, the sports psychologist in the Soviet Union assumes an active role at the very beginning of all training regimens, concentrating on creating methods to maximize performance.[51]

Dr. Raipov corroborates Garfield's assertion that Soviet sports psychologists are assigned an "active role" in the training of top athletes. The Soviet Olympic team, he says, maintains 10-12 sports psychologists on their payroll, while every large city in the USSR has at least one sports psychologist available to work with athletes.[52]

Garfield, in a most arresting section of his book, discusses the history of Soviet research into self-regulation (PSR). He notes that Alexander Romen "included both *physical* and *mental* response conditioning" in his experiments on self-regulation training, leading to this discovery:

Electromyograms, a method for measuring the electrical impulses that occur in muscles just prior to actual movement, revealed that muscles actually perform the physical activity imagined or suggested by words. Romen showed that psycho-neurological factors that produce specific muscular responses in humans can be

“programmed” in advance of the performance of that activity through mental imagery. Thus, mental imagery becomes an invaluable tool in achieving peak performance in sports.[53]

What this passage says is that when you visualize yourself performing some movement, the muscles involved in that movement are activated. This muscle activation also occurs if, rather than imagining a movement, you give yourself an autosuggestion relating to the desired movement. Dr. Suinn, in his work with skiers, encountered the same phenomenon. He relates what happened during one experiment:

I recorded the electromyograph responses of an Alpine ski racer as he summoned up the moment-by-moment imagery of a downhill race. Almost instantly, the recording needles stirred into action. Two muscle outbursts appeared as the skier hit jumps. Further muscle bursts duplicated the effort of a rough section of the course, and the needles settled during the easy sections. By the time he finished this psychological rehearsal of the downhill race, his EMG recordings almost mirrored the course itself. There was even a final burst of muscle activity after he had passed the finish line, a mystery to me until I remembered how hard it is to come to a skidding stop after racing downhill at more than 40 miles an hour.[54]

Garfield feels that, based on what he learned about sports psychology research and applications in the USSR, “the Soviets had demonstrated that optimal human performance could be *orchestrated*.” For this to occur, he continues, an organized mental training program must be in place. Garfield emphasizes:

The foundation of every peak performer’s training is contained in a single word: *program*. Without the structure provided by a clear, step-by-step training program, the athlete can waste precious hours, or even years, seeking a path to excellence . . . [55]

Having said this, Garfield presents his Peak Performance Training Program. This program culminates in a four-step exercise, called “Letting Go,” which Garfield attaches great importance to because it “is the focal point for every skill you have developed thus far.” A brief summary of this exercise follows:

Letting Go

Time: One 20-minute session prior to an athletic event

Step 1 — Visualize the Event

From an hour to as little as fifteen minutes before you are to begin an athletic event, sit down in a quiet place and create a mental image of the activity you will be performing.

... While creating these images, go over them repeatedly in your mind, filling in more and more details as you go.

Step 2 — Quiet Your Mind

As concentration on athletic activity increases, your mind will become calm, active only where your upcoming activity is concerned. As this focus improves, marked by the disappearance of thoughts and feelings not directly associated with your sport, stop creating the mental imagery.

... If it is at all possible, given your surroundings, close your eyes.

... As thoughts, ideas, or feelings of any kind—athletic or nonathletic—enter your mind, let them go.

Step 3 — Rid Yourself of Negative Thoughts

Visualize negative thoughts written on paper; then visualize wadding the paper up and burning it. Use this or other visualizations to rid yourself of negative feelings prior to or during any athletic performance.

Step 4 — Focus on the Present

As your mind becomes more and more clear through application of the preceding processes, allow your attention to turn increasingly toward the reality of the present moment. Focus on your senses. If there is noise around you, focus on the *quality* of the sound rather than on its meaning. This takes some practice, but it will become easy in time.[56]

Garfield states that this four-step exercise, once mastered, will “allow your mind and body to come together as one and function at optimal levels” during competition.[57] While mental training provides no guarantees, Garfield’s point is well taken; this is because there are many elements of the “Letting Go” exercise which correspond to the mental preparation approaches used with success by athletes mentioned throughout this book. Step 2, for example, is similar to what Valery Borzov did, who, we recall, quieted his mind before a race this way: “During the warmup process I call to mind a forest and a fishing scene. This leads me to feel tranquil and discourages a feeling of bustle and hurry.” Step 3, meanwhile, is virtually identical to the “attunement exercise” Barbara Lynch utilized in winning the 1979 European 15 Trench Trap-Shooting title (see Amateur Athletes chapter). And on we can go with the comparisons.

That elite level Soviet athletes regularly engage in mental training of the sort described by Garfield was reconfirmed three years later by Dr. Yessis in his exceptional work, *Secrets of Soviet Sports Fitness and Training* (1987). In this book, Dr. Yessis reports that top Soviet “athletes are placed in a six-month-long psychological training schedule to develop proper mental attitudes. Thereafter, they spend at least ten to fifteen minutes of every training day in psychological preparation.” He goes on to note that this psychological preparation involves the employment of such mental training strategies as autosuggestions and visualization. Further, some Soviet athletes, relates Dr. Yessis, told him that they had developed an “instant relaxation” capability which, when necessary, they employ “in the midst of competition.”

Without reciting in detail all the salient points Dr. Yessis makes in his book, I shall merely provide a crude, though instructive, summation of the work’s thrust:

Soviet Elite Athletes

1. Are immersed in a variety of mental training programs.
2. Employ advanced conditioning concepts, particularly speed-strength training.
3. Win the lion’s share of medals in international competitions.

U.S. Elite Athletes

1. Rarely meet with a sports psychologist more than once or twice.
2. Adhere to strength training regimens, which make one slower and more injury-prone.
3. Continue to lose “the American way.”

Also in 1987 the Soviet national basketball team toured the U.S., playing several college teams, as well as the Milwaukee Bucks. The October 25th game against the Bucks was televised

by ABC. During halftime a segment was shown of Aleksandr Gomelsky, coach of the Soviet national basketball team, leading his players through a "relaxation session." The players, with closed eyes, were seen lying down on a gym floor, forming a circle; their feet pointed toward Coach Gomelsky, who stood in the center. The players, having already attained a relaxed state, were listening to positive statements (i.e., hypnotic suggestions) from Gomelsky. Such sessions, the viewer was informed, are conducted every day, and last approximately five minutes. The documentary, in short, brought to life, as only visual images are capable of doing, the obviously well-grounded contentions of Dr. Raipov, Dr. Yessis, and others. (To follow up on this report, it should be noted that this same Soviet team captured the gold medal in the 1988 Olympics, upsetting in more ways than one the highly favored U.S. Olympic basketball squad in the semifinals.)

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The training regimens followed by Soviet Olympic athletes have deservedly earned the reputation as being the world's best. We have seen in this chapter that these regimens most assuredly incorporate mental training, a key element in the Soviet's quest to develop the high-level athlete. Assuming you also wish to raise the level of your athletic performance, try out some of the mental training strategies described throughout this chapter and book. The alternative is to continue to rely on obsolete psych-up gimmicks—such as fiery pre-game speeches by the coach—that are rarely more than transitory and minimal in effect. But, to do this is to retrogress, not progress. As Dr. Yessis points out, "'Win one for the Gipper' is out the window now." That approach just does not do the job. Because the subconscious can, and often does, sabotage the best-laid conscious plans, something else is called for. Specifically, the subconscious mind needs to be addressed and properly programmed. Only mental training can do this for you. Therefore the smartest course of action to adopt is to emulate Valery Borzov and all the other great athletes appearing in this book who have learned and applied mental disciplines to attain peak performance.

FOOTNOTES

1. Dick Douce, "Hypnosis: A Scientific Training Aid for Bodybuilders," Joe Weider's *Muscle* magazine, July, 1979, p. 51.
2. William S. Kroger, *Experimental and Clinical Hypnosis*, (Philadelphia: J. B. Lippincott Company, 1977), p. 340.
3. Ibid.
4. Richard Suinn, "Body Thinking: Psychology for Olympic Champs," *Psychology Today*, July, 1976, p. 38.
5. "East German SECRETS?" *Track and Field News*, November, 1976, p. 32.
6. Ibid.
7. Henry Gris and William Dick, *The New Soviet Psychic Discoveries*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1978), p. 243.
8. Rich Roberts, "Russians Will Do Anything to Win and Often Do, Says Expert," *Los Angeles Times*, July 21, 1978, Part III, p. 10.
9. Gris and Dick, *op. cit.*, p. 239.
10. Ibid.
11. Ibid., p. 240.
12. Ibid.
13. "Karpov Celebrates Saving Chess Title," *Los Angeles Times*, October 19, 1978, Part I, p. 14.
14. "Chess Brain Waves Doubted," *Los Angeles Times*, October 19, 1978, Part I, p. 15.
15. P. M. Kasyanik, "Psychological Aspects of Weightlifting Competition," *Soviet Sports Review*, March, 1980, Vol. 15, No. 1, pp. 31-33; originally published in *Teoriya i Praktika Fizicheskoi Kultury*, 10:18-21, 1978.
16. E. I. Gamal, "The Psycho-Prophylactic Method Prior to Competition in Wrestling," *Soviet Sports Review*, March, 1971, Vol. 6, No. 1, p. 26.

17. Mike Spino and James L. Hickman, "Beyond the Physical Limits," *Runner's World*, March, 1977, p. 53.
18. Without belaboring the point, the instance of hypnosis decreasing sensitivity to pain in patients at the Walter Reed Army Medical Center will be cited (see Baseball chapter). The reader is left to discover other related cases.
19. B. Blumenstein and N. Hudanov, "Psychological Preparation for Competition," *Soviet Sports Review*, March, 1980, Vol. 15, No. 1, p. 1.
20. *Ibid.*, pp. 1-2.
21. *Ibid.*, p. 3.
22. *Ibid.*
23. *Ibid.*, pp. 3-4.
24. *Ibid.*, p. 4.
25. G. D. Gorbunov, "Contemporary Psychological Preparation of Athletes," *Soviet Sports Review*, June, 1982, Vol. 17, No. 2, p. 53.
26. *Ibid.*, p. 54.
27. *Ibid.*, p. 55.
28. *Ibid.*, pp. 56-57.
29. *Ibid.*, p. 56.
30. *Ibid.*, p. 57.
31. Subscription information on this journal can be obtained from: *Soviet Sports Review*, P.O. Box 2878, Escondido, California 92025.
32. Leslie Maslakov, "Interpreter Makes Sports a Universal Language," *Santa Ana Register*, February 22, 1979, p. C1.
33. Fundamentally, there are two major reasons why we in the U.S. have gained little understanding of how the Soviets train. One of these reasons is the language barrier. The two Soviet athletes I interviewed both communicated quite well in English. This proved most fortunate; otherwise, I would have remained in the dark, as I do not speak Russian. So, it is necessary for us somehow to overcome this language barrier. Dr. Yessis suggests this could be accomplished by having college students act as interpreters between U.S. and Soviet athletes. No matter how it is done, though, Dr. Yessis emphasizes that "it's very important to talk to these people and really know what they're doing."

The other main reason why we know little about Soviet training techniques is because American officials and coaches actually discourage our athletes from talking to the Soviet athletes. This at least is what Dr. Yessis personally told me. I contacted Dr. Yessis in September, 1979, and was surprised to hear about this problem of interfering American officials. Dr. Yessis said that, as editor of the *Soviet Sports Review*, he constantly translates Soviet sports journals into English. To him it is clear the Russians have developed extremely advanced training systems. But, he noted, the American officials and coaches in charge of the various U.S. national teams believe we can learn nothing from the Soviets! This erroneous belief, though, is not supported by results of Soviet-U.S. meetings. In fact, Dr. Yessis contended in 1981 that because many American coaches "are living in the dark ages" and "are afraid of science," the U.S. would finish behind the Soviet Union and East Germany in the 1984 Olympics (see "Soviets Are More Serious About Playing, Fullerton Professor Says," *Los Angeles Times*, June 26, 1981). The USSR and East Germany participated in the '84 Winter Olympics, though not the Summer Games. In the '84 Winter Olympics the final standings more than confirmed Dr. Yessis's prediction: 1) USSR (25 medals overall), 2) East Germany (24), 3) Finland (13), 4) Norway (9), 5) Sweden and U.S. (8; tie). The 1988 Summer Olympics reconfirmed the pattern, with the USSR finishing first once again (132 medals total), followed by East Germany (102 medals), and then the U.S. (94).

34. Bill Shirley, "The Eastern Bloc Comes Into L.A. With a Head Start," *Los Angeles Times*, January 24, 1989, Part III, p. 10.
35. *Ibid.*
36. Beth Ann Krier, "Soviet Approach to Sport a Precise Science," *Los Angeles Times*, July 12, 1983, Part V, p. 1.
37. *Ibid.*

38. Shirley, *op. cit.*
39. Krier, *op. cit.*
40. Ibid.
41. Pete Donovan, "Soviets Are More Serious About Playing, Fullerton Professor Says," *Los Angeles Times*, June 26, 1981, Part III, p. 12.
42. Shirley, *op. cit.*
43. Valery Borzov, "An Hour Before the Start," *Soviet Sports Review*, December, 1981, Vol. 16, No. 4, pp. 202-203.
44. Steve Grimley, "Mind Games: U.S. Slow to Accept Sports Psychology," *Orange County Register*, April 19, 1985, p. D15.
45. V. Zobkov, "Psychological Preparation of the Young Sprinter," *Soviet Sports Review*, March, 1983, Vol. 18, No. 1, pp. 21-23.
46. Zobkov defines this trait: "Athletes with a sport-as-work motivation are characterized by a desire to attain high goals—to fulfill Master of Sport norms and to win a place on the national team. These athletes clearly see the stages leading to this goal. They are typically adept at working actively to overcome obstacles and they display creative initiative, tenacity and a self-critical attitude toward their successes and failures. Such athletes are able to assess quite accurately their preparedness for participation in competition. They set high but attainable goals, remain convinced that they can achieve them and show sound emotional stability. These positive personality traits are seen in meticulous preparation for the start, in an overall uplift of their strengths and in maximum realization of their capabilities in competition."
47. Zobkov, *op. cit.*
48. Charles A. Garfield, Peak Performance: *Mental Training Techniques of the World's Greatest Athletes*, (Los Angeles: Jeremy P. Tarcher, Inc., 1984), p. 85.
49. Ibid., p. 86.
50. Corky Fowler and Christopher Smith, *The Hidden Skier*, (Chicago, Illinois: Contemporary Books, 1977), p. 20.
51. Garfield, *op. cit.*, p. 15.
52. Dr. Bruce Ogilvie, a U.S. sports psychologist possessing extensive Soviet and East German athletic connections, places the figure closer to 40 (see "The Eastern Bloc Comes Into L.A. With a Head Start," *Los Angeles Times*, January 25, 1984).
53. Garfield, *op. cit.*, p. 63.
54. Suinn, *op. cit.*, p. 43.
55. Garfield, *op. cit.*, p. 29.
56. Ibid., pp. 187-191; for purposes of clarity I have slightly edited Step 3.
57. Ibid., p. 192.

MENTAL TRAINING STRATEGIES TIME LINE
(FOOTBALL)

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Use of Meditation

(Kevin McLain of the Rams did this 2-3 times a day; Jim Marshall; Joe Namath)

Mental Training Program

(Sports psychologist Dan Smith worked with Illinois University football team, teaching imagery, goal-setting, etc.; Iowa quarterback Gordy Bohannon followed one under Dr. Gauron's guidance; Saul Miller taught imagery/relaxation techniques to interested Rams players and coaches; Dr. Nicholi serving as team psychiatrist for the New England Patriots)

Simulation

(UCLA practices while listening to a crowd noise tape during workouts; the Rams often run plays in total silence during workouts)

Hypnosis Sessions

(Hypnotherapist Bob Davies, an ex-football coach, conducts these with football player clients)

Hypnosis Sessions

(Arthur Ellen held these with Rose Bowl teams)

Visualization Sessions

(Rams great Jack Youngblood practiced visualization while driving his car; Dewey Selmon of the Buccaneers used the technique "all the time;" quarterback Frank Ryan would "visualize my receivers, imagine the ball going out," and also practiced a focal point drill during workouts; All-Pro cornerback Leroy Irvin listened to an imagery tape)

Visualization

(Rams placekicker Frank Corral engaged in "visualizing the ball going through the uprights")

Use of Self-hypnosis

(Placekickers Uwe Von Schamann and Greg Steinke would give themselves autosuggestions before field goal attempts--"keep my head down, follow through," etc.)

FOOTBALL: PLAYERS TACKLE MENTAL TRAINING

Each year football becomes more complicated and bone-crunching. It seems that every player nowadays lives in the weight room, striving to develop into a physical specimen that can really dish out and withstand punishment. A concurrent development is the adoption by professional, college, and high school football teams of over a hundred different formations, which result in a thousand or more possible plays. The offense has to know how to execute all these plays, and the defensive unit is expected to stop them. Obviously, the mental demands on football players are greater than ever. The player must motivate himself to attain peak physical condition and cope with grueling workouts; he must also be able to play "smart" on the field—an absolute necessity because one mental error can cost the entire team the game. It is no surprise, therefore, that many football players have turned to visualization, meditation, or hypnosis to help them deal with the demands of their sport. Some head coaches, realizing the inadequacies of outmoded pep talk approaches, have brought in sports psychologists to help their players with their mental preparation. In this chapter we shall see how wise these decisions by certain players and coaches to try out various mental training strategies proved.

Meditation

Meditation is one mental discipline which some professional football players have adopted. For instance, the *Associated Press* once reported that Jim Marshall, the great defensive end Hall of Famer for the Minnesota Vikings, who retired in 1979 after playing in the National Football League for 20 years, "is into transcendental meditation."^[1] Marshall started 280 straight regular season games—a NFL record—though to what extent meditation helped him accomplish this feat one cannot say without talking to the man.

Another person who practiced meditation during his professional football career is Kevin McLain, who was special teams captain and reserve linebacker for the Los Angeles Rams before a knee injury ended his playing days in 1979. McLain was an All-American linebacker at Colorado State in 1975, and the first-round draft pick of the Rams in 1976. I interviewed him in August, 1977 during the Rams summer training camp. This period is a tense time for the professional football player, because there is always the chance he might be cut. When McLain was a rookie in 1976, he did not engage in meditation, and the pressures of training camp got to him. He informed me:

The college football system is run with a lot of emotion involved, and I tried to carry that into professional football. When that didn't work for me, I began to get frustrated.

I had problems dealing with the frustration, and realizing that all I needed to do was to not worry about making a mistake, not let it bother me, and know I'd have the opportunity to do it right. But, I got myself in a situation which kept snowballing and snowballing. The harder I tried, if I made a mistake, the more frustrating it was. I didn't have the understanding of the game that I have this year.

Finally, 3/4 of the way through McLain's first year with the Rams, he started meditating:

Say I'd come home from practice, and it had been a rough day: I'd sit down, find a comfortable place. I used to sit out on a porch or under a tree. And I'd try to totally clear my mind, and have my thoughts not focused on any one thing.

When you begin, you have all sorts of thoughts going through. Like you close your eyes and things keep popping up, firing at you, trying to get your attention. At first they do for a second. And then you learn to let them slip off to the sides.

So, you're actually training your mind to totally block everything out. And it does take practice; at first it took me a long time. But, the more I did it, the easier it was.

Not only did the meditation come easier for McLain, but it also seemed to improve his football performance and general well-being. He continued:

It's changed my outlook. Because my outlook's changed I have the ability to concentrate; my concentration in football is sharper. And because of that I'm a better football player. The whole thing is like the difference between night and day from last year to this year.

Meditation has also made me a better person. I have the ability to deal with people, and not take things personally.

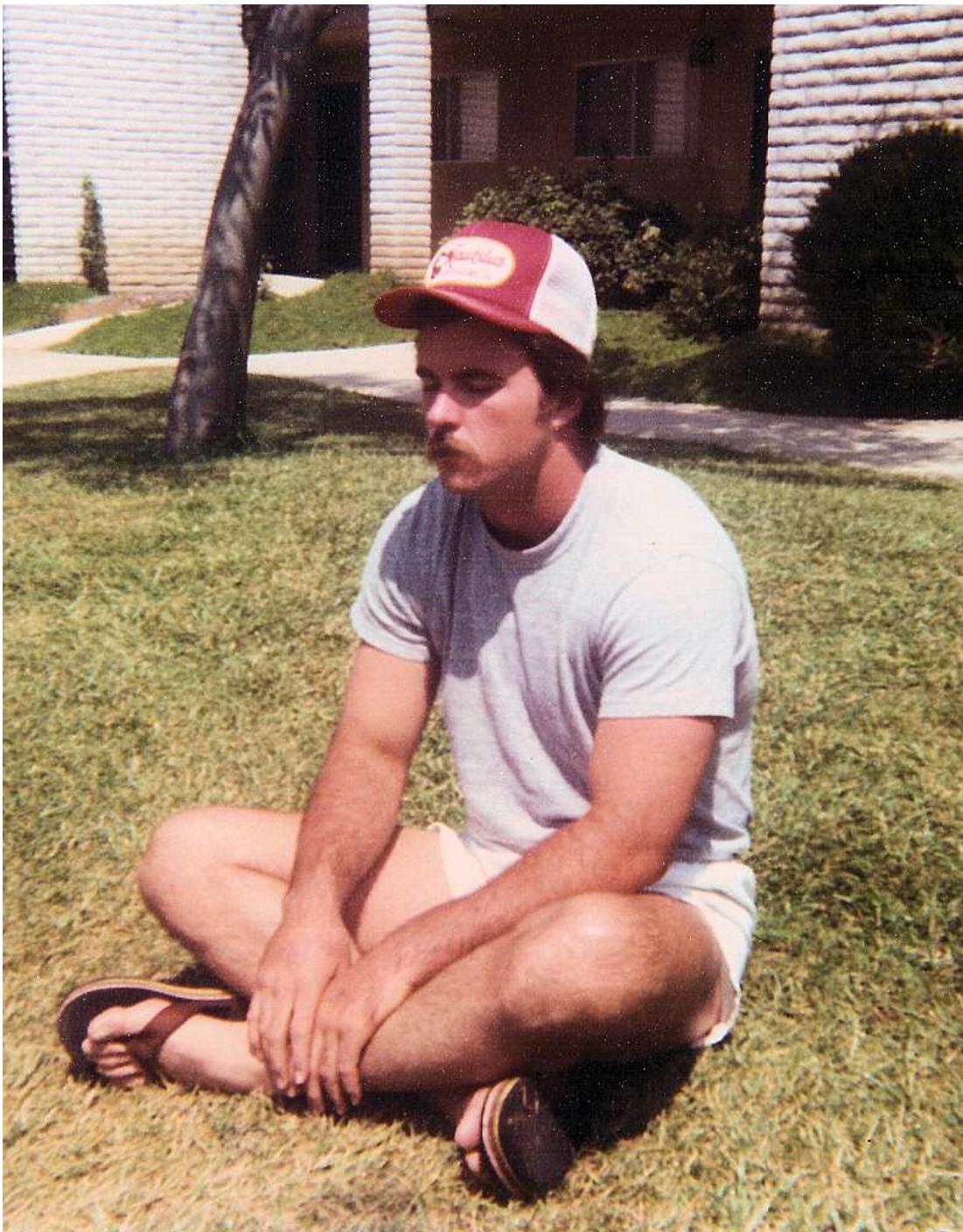
According to McLain, "no coach here has ever talked to me about any kind of serious mental preparation." We know, of course, that it is a rare coach who knows much about mental rehearsal techniques. Also, some coaches at the professional level believe that money acts as the main motivator anyway. Give the athlete enough money, goes the reasoning, and he will see to it that he is always prepared to give it his best. Even the most highly-paid professional athletes, however, sometimes slack off during a game, as well as occasionally commit costly mental errors. Money is really not a mental coordinator. As McLain told me, "Some people in sports, even on the professional level, don't know what it takes to be mentally ready."

The ex-Rams linebacker, though, knew what it took to be mentally ready. He meditated two to three times a day usually. Because he regularly practiced meditation, and became good at it, McLain was able to meditate under almost any circumstance. He demonstrated this ability to me, in fact. We went out to a grassy area at the Rams compound. McLain sat down and immediately slipped into a calm and relaxed state. As I took his picture, he pointed out that he did not mind people knowing that he meditated, and no one on the team appeared to mind, either. McLain, besides showing me that he could meditate practically anywhere and any time, told me about a related incident:

I'm to the point where I don't necessarily need to be in a comfort situation. For example, today I made a mistake on a play. The coach came up and jumped on me about it, and explained it to me. I went over to the sidelines, and the second team came in to take their five plays. I sat down on my helmet during those five plays and was *completely* gone. But, the thing about it was, I realized I made a mistake and why, and knew what I needed to do to correct the mistake. There was no reason for me to go over there and *throw* my helmet down and get mad.

So, meditation really helped McLain maintain control over his emotions. According to Herbert Benson, author of *The Relaxation Response*, this increased self-control is one of the main benefits meditation (called the "relaxation response" by Benson) provides. He states that "you will be able to cope better with difficult situations by regularly allowing your body to achieve a more balanced state through the physiologic effects of the Relaxation Response."^[2]

In professional football, the quarterback is constantly confronted with stressful situations. From Kevin McLain I learned that a quarterback teammate coped with those pressures by regularly practicing meditation. This was Joe Namath, the hero of Super Bowl III, who spent his last year in pro ball with the Rams. When Namath appeared on TV talk shows at the time, he sometimes mentioned that he meditated. Dr. Thomas Tutko, in his book *Sports Psyching* (1976), also notes Namath's well-publicized use of meditation. I wanted to pursue these leads, so I tried to



(Bob Stevenson photo)

Kevin McLain, L.A. Rams linebacker (1976-79), is shown practicing meditation between workouts at the Rams summer training camp in 1977. He did this 2-3 times a day.

make arrangements to interview Namath. Joe, however, is such a great personality that everybody else wished to talk to him, too. Even Kevin McLain could not find an appropriate time to approach Namath, his own teammate, about my desire to interview him. I therefore never made the contact. In any case, it is instructive to know that professional football's most celebrated quarterback practiced meditation during his career.

Joe Namath, as football fans recall, possessed a truly magnificent arm; but, his knees were a different story. Thanks to wild-charging linemen, his knees were always getting injured, requiring surgery. When Namath was back on the field, it was all he could do to simply drop back for a pass. The pain in his knees was constant no doubt. It is likely that he used meditation to help put the pain out of his mind. One scientific study suggests that meditation can serve this purpose. In a February 12, 1979 *U.S. News and World Report* article, "Science Takes a New Look at Faith Healing," it is noted that:

Yogis and religious mystics have long used meditation and prayer to combat pain. Now some researchers say they are discovering biological processes that may explain how this works.

Three University of California scientists have demonstrated that hopeful thoughts can cause the body to secrete its own pain-killing drugs, a recently discovered family of morphinelike chemicals called endorphins.

In their experiment, 50 patients with painful tooth extractions were told that they were going to get a powerful pain-killing drug. Instead, they were given placebos—fake medicines, such as sugar pills—whose occasional power to cure has always puzzled physicians. Even though the patients had suffered physical damage to their jaws, one third of the sufferers felt less pain.

To test for endorphins, those patients were injected with a substance that blocks the effects of all drugs related to morphine. In every case, the pain returned. This, said the researchers, indicated that the relief may have been caused by secretion of the morphine-related endorphins, triggered solely by the patients' faith that they were getting effective treatment.

"Hopeful thoughts" can produce a beneficial physical effect, aside from their acknowledged psychological merit, a fact that wise men have known for a long time. One such man was the great Arab doctor, Yohanna Ibn Masawaih, whose illustrious career spanned the Golden Era of the Arab Empire. For 50 years, Yohanna served as personal physician to the Caliphs, until his death in 858. During these years his medical lectures in Baghdad were always well attended, perhaps because of his keen abilities as a sharp conversationalist. Yohanna, besides possessing a quick mind, also possessed the unshakeable belief that a sound body, mind, and spirit are prerequisites for good health. History records one incident where Yohanna brilliantly drove home his holistic philosophy:

A priest once came to him, and said, "I feel unwell in my stomach." "Use," said Yohanna, "the *Electuarium Susianum*." "I have done so," replied the man. "Use the *Electuarium Diacyminum*," said Yohanna. The man replied, "I have already taken some pounds of it." He then ordered him to take the *Pentadicon*, to which the other replied, "I have already drunk a whole vessel full." "Use the *Confectio Ambrosia*," said Yohanna. "I have already done so, and in large quantities." At last Yohanna grew angry, and said to the man, "If you want to get well, embrace Islamism, for that is good for the stomach!"[3]

Hypnosis

One of the more confusing sports hypnosis stories I have ever come across centers around Uwe Von Schamann, when he was a field goal kicker for the University of Oklahoma in 1977. The contradictory details can be found in a June, 1978 *Sky* magazine article written by Dan Lauck. According to Lauck, Von Schamann used a “meditation technique, part of a program called Relaxation Responses” to mentally prepare himself for his game-winning 40-yard field goal against Ohio State (with only six seconds to go). The crowd of 88,000 people in Ohio Stadium were screaming at Von Schamann to miss. Then, they broke into the chant, “Block that kick!” Lauck relates what happened next:

Von Schamann began to walk around as they chanted, then raised his hands into the air, index fingers pointed up, and began to direct the chant.

The rhythm of the chant matched a rhythm in Von Schamann’s head. He was repeating a single word over and over again in his mind: one. It was his mantra, and when he repeated it he would drift into deep concentration.[4]

Was Von Schamann using meditation? Lauck states, as we just read, that Von Schamann employed a “meditation technique;” that is as straightforward as you can get. Then, Lauck says that Von Schamann used a mantra, which is a normal practice of meditators. But, later on in the article Lauck implies that hypnosis is actually what Von Schamann used:

At Ohio State that day, for example, Von Schamann heard the cheers and chants, but it wasn’t until a few weeks later that his hypnotist pointed out that he had raised his index finger as he led the chanting.[5]

Lauck never identifies Von Schamann’s hypnotist. The important point, though, is that we are left wondering what mental training strategies Von Schamann used—meditation or hypnosis? Generally, in meditation you adopt a passive mind-set and a comfortable position. You also select a quiet environment. Right before he made the field goal Von Schamann did not adopt a passive mind-set nor a comfortable position; instead, he was directing the chanting crowd. Ohio Stadium, meanwhile, with its screaming multitudes, hardly qualified as a quiet environment. The only thing resembling meditation which Von Schamann did was to repeat his mantra—the word “one”—to himself.

What we have to realize is that hypnosis and meditation are such close cousins that often they are virtually indistinguishable. Long ago I came to the conclusion that it is best at times to regard hypnosis, meditation, visualization, self-regulation, and so on as just 89 different names for the same thing. Holding this point of view is definitely justifiable for anyone trying to make sense out of the following discussion of Von Schamann’s mental preparation while serving as the place-kicker for the Miami Dolphins.

During the 1984 season Von Schamann experienced a terrible slump, making only nine field goals, the lowest total of his six-year professional career. The Dolphins were headed to Super Bowl XIX, and people were worrying that Miami’s placekicker would mess up in the big game. But, Von Schamann expressed confidence that he would come through, stating to *Orange County Register* reporter John Strege that “as far as the season is concerned, that’s something that’s in the past.”[6] Strege describes the Dolphins kicker as being “into meditation,” though it appears that he was also into self-hypnosis. Von Schamann told Strege, “I sit upright and inhale and exhale. What you want to do is be totally relaxed within yourself and give yourself positive suggestions.”[7] Autosuggestions are a trademark of self-hypnosis, not meditation. Continued Von Schamann, “I’ll just think positive (and) tell myself to make sure and have the same swing as I always have and to keep my head down.”[8]

Mental training terminology can get confusing at times. What is “meditation” to one person is

"self-hypnosis" to another. Von Schamann's mental preparation procedure certainly included elements of meditation (the "inhale and exhale" part, leading to being "totally relaxed"). However, autosuggestions were then introduced ("I'll just think positive. . . tell myself to. . . keep my head down" and so on), qualifying the procedure to be called self-hypnosis. Whatever we call the kicker's mental rehearsal routine, it clearly worked for him during Super Bowl XIX. Von Schamann went 3 for 3, and was one of the few Dolphins who performed well in the game, as the San Francisco 49ers buried Miami, 38-16.

A similar blending of mental rehearsal techniques is seen in the experience of Greg Steinke, a field goal kicker for Cal State Fullerton (1981-84). During the '83 season Steinke made the headlines with his last second heroics. Against Boise State he kicked a 51-yarder with nine seconds remaining to give Fullerton a 13-10 win. *Orange County Register* writer Chuck Abair reported after the game that Steinke "practices hypnosis in field goal situations," while the Fullerton kicker stated that "they (Boise) called time out to make me wait, but I just kept practicing and telling myself to keep my head down and follow through." [9] Note that both Steinke and Von Schamann gave themselves the autosuggestion to "keep my head down"—obviously an important technical point for field goal kickers to drum into their subconscious.

Later in the season Steinke provided an encore to his Boise State performance, kicking a 45-yard field goal with 13 seconds left to defeat Utah State. This double accomplishment interested *Los Angeles Times* staff writer John Weyler, who came up with a mishmash description of the Fullerton kicker's mental rehearsal technique:

He goes through a mental ritual—a sort of self-hypnosis—during which he visualizes the kick. And the extra time (during a timeout) allows him to "see" the kick go through the uprights a number of times. It also provides Steinke with time to "relax and concentrate."

Steinke, who works with Cal State Fullerton yoga instructor Ken Ravizza, repeats a mantra of sorts, reminding himself to keep his "head down... planter flexed. . . follow through, pendulum swing." [10]

After reading this passage, most people would not know if Steinke used self-hypnosis, visualization, yoga, meditation, or a witch's brew of all of these. The repetition of one word, such as "om," comprises a mantra, and mantras, as we previously pointed out, are used by meditators. The "mantra of sorts" Weyler says Steinke gave himself—"head down... planter flexed... follow through, pendulum swing"—is misnamed. These are autosuggestions. When Steinke "visualizes the kick," he was clearly practicing visualization, which Weyler calls "a sort of self-hypnosis," thereby muddying the distinction.

At the time of Weyler's article the Fullerton kicker had made an impressive 27 of 35 attempts during his college career, and noted that "I really don't see anything out there. At Utah, I never saw the rush and a guy missed blocking that kick by a couple of inches." [11] This not seeing anything (except the ball, presumably) indicates the presence of a super-concentration of the mind state, which is one of the hallmarks of hypnosis. All in all, the evidence points to Steinke using a mental training strategy which blends self-hypnosis with visualization. It is easy, therefore, to see how Weyler and others could stumble in trying to portray such a mental discipline, which in reality is a hybrid.

Bob Davies, a former Assistant Football Coach at Cal State Fullerton, opened a hypnotherapy practice, with some of his clients, as one might expect, being football players. One was an unidentified "average punter," who, the story goes, became one of the top five punters in college football after employing Davies' mental techniques. [12] Two others were Keith Vanderhoff and John Finn of El Modena High School in Orange, California. Vanderhoff, the top high school field goal kicker in Orange County history, recalled for David Osterman of the *Orange County Register* his

hypnosis sessions with Davies:

Before he put me under the first time, he had me go through everything which goes into a successful kick. Then he put me under and replayed all that for me. It gives me a more positive attitude.[13]

Teammate Finn, a receiver, also found the hypnotherapist's assistance beneficial, testifying that "since I started going to him, I think I've been able to get to every ball I possibly could during games."[14]

Not always, however, does hypnosis produce immediate benefits or instant miracles. In 1982 Eastern Michigan was expanding college football's longest losing streak. Enter hypnotist Dave Pappas. He worked with the players, and expressed his belief to the press that the team would defeat Ohio University. "These boys," stated Pappas before the game, "have a lot of character, especially considering they play on a team that's lost 24 in a row."[15] Despite possessing character and working with a hypnotist, the Eastern Michigan players saw their streak continue. They lost 14-13 to Ohio University. Two additional losses followed, first to Northern Illinois (10-0) and next to Ball State (16-0). Finally, Eastern Michigan squeaked by Kent State, 9-7, four weeks after Pappas's optimistic and wrong prediction.

Visualization

The mental training strategy which seems to have gained the most favor with professional and college football players is visualization. Bob Oates, Jr. interviewed several top professional football stars about their mental preparation, and published their remarks in his book, *The Winner's Edge* (1980). Three players—defensive end legend Jack Youngblood of the Los Angeles Rams, All-Pro linebacker Dewey Selmon of the Tampa Bay Buccaneers, and quarterback Frank Ryan, who led the Cleveland Browns to the NFL championship in 1964—told Oates how visualization helped them make the big plays.

Jack Youngblood, the 1975 and 1976 NFC Defensive Player of the Year, often practiced his mental discipline while battling the intense Southern California traffic, demonstrating that time spent on mental training need not conflict with time allocated for physical workouts. Related Youngblood:

I visualize things in my mind before I have to do them. . .

Let's say I'm out driving. You spend a lot of time on the freeways in Southern California, and it gives you time to think. I'll be sitting there in traffic and I'll imagine the game coming up. I'll visualize what the offense is throwing at me. I'll pick out specific instances, like the way the tackle in front of me sets up to pass block. Then I'll picture myself rushing in, making a certain move on that tackle, getting around him. I'll play the whole game like that way, in my mind.[16]

Oates wanted to know how the visualization helped him, to which Youngblood replied:

By the time you are out there (on the field for theame) on Sunday, it's almost like *deja vu*. You've been there before. You know what you want to do. So you just get after it. It's like you program your mind for success.

The defensive end standout, who played in Super Bowl XIV with a broken foot, went on to say that there are a lot of mental rehearsal "techniques you might try. And I think if you take some of these to heart, you can find some things that will lend you a hand." Visualization lent Jack Youngblood a hand, helping him to be chosen All-Pro for six seasons.

Dewey Selmon strongly endorsed visualization, claiming that it allowed him to "play the game

faster" and to "stay one step ahead of the quarterback all the time." He commented:

It's a powerful tool. I use it all the time. I spend so much time seeing their (the other team's) formations in my mind, and then watching the specific plays they run from those formations, that by game time when I see them line up, the right plays just come to me automatically. "32 Blast, 38 Wide, 92 Pattern," I hear the list in my mind as they get into their stance.[17]

Oates requested the Buccaneers' linebacker to provide a specific example of how visualization aided him during a game. Selmon obliged:

In the (1979) playoffs against Los Angeles. They were on our two-yard line and they came out in what we call the "Western I" formation—with two tight ends and a close wingback. As soon as I saw that formation, I knew where they were going. Right at me. 32 Blast.

I called out to my linemen—we have code words—and I had them all pinch into the two-hole right in front of me. The play got nothing. If you are prepared mentally like that, you can save yourself a lot of physical effort.

Offensive players in football can also use visualization to advantage. Frank Ryan recalled that he would "think about defenses, visualize my receivers, imagine the ball going out. I would create the whole situation in advance." Sometimes, though, things do not go the way you want, and the former Cleveland quarterback worked out a mental procedure to deal with adverse developments. He states:

I'd imagine ahead of time all the states of mind I might get into, and what to do for each different state.

I'd get ready for the time I might throw an interception, for instance. I'd rehearse what I should do with my mind. I'd think about how I should feel coming off the field, what I should think about sitting on the bench. The idea was to establish a peaceful countenance and to be ready to fight myself out of trouble mentally.[I8]

Ryan next detailed to Oates the thought patterns he programmed himself to experience in case he made an error, the coalescence of which, he observed, formed "an optimal procedure for concentrating on useful thoughts." During workouts Ryan also practiced a focal point drill while throwing. He would aim, he relates, "at a specific target like a shoulder pad or face mask. As the target got smaller, the concentration became more intense." Oates was curious if this focal point drill really worked, and the quarterback answered affirmatively:

It almost got to where you were in a trance. All you had your mind on was this thought about throwing the ball to a certain spot. Then, without even being conscious of doing it, the ball would just go out there.

Most athletes will tell you that they face a lot of pressure situations in their particular sport. Quarterbacks especially have a right to make this claim, and Ryan did not hesitate to follow suit. He contended that "the most important thing for a quarterback is to remain stable psychologically under all that pressure." Easy to say, but how does one go about it? The ex-Browns quarterback points to **regular** practice of mental training as the key, noting that "I worked on my mind all week every week."

Use of visualization was second nature to former L.A. Rams placekicker and punter, Frank Corral. In a game against the Atlanta Falcons in 1981, Corral made a 25-yard field goal with 24 seconds remaining to give the Rams a 37-35 victory. After the game *UPI* reported Corral as remarking:

No, I didn't feel any pressure. When I walk on the field, I start visualizing the ball

going through the uprights. It never occurs to me that I could miss.[19]

Perhaps Corral would have made the 25-yarder without employing visualization, but the fact that he brought up his use of the discipline indicates the importance he attached to it; clearly, he thought visualization benefitted his kicking.[20]

Performing well by using visualization or other mental disciplines is, as we have repeatedly discovered, not a sure thing. Sean Salisbury, starting quarterback at USC for much of the 1985 season, took up imagery before the season opener. He had a couple of mental training sessions with sports psychologist Dan Smith, who is noted for his work with the University of Illinois football and basketball teams. Of the sessions with Smith, Salisbury declared, "Unbelievable, it really works."[21] The USC quarterback, being stationed in Los Angeles, apparently found it impractical to continue to meet with Illinois-based Smith, and turned to a local provider for assistance with his mental preparation. He told Mal Florence, *L.A. Times* staff writer, the following:

I've been seeing a sports psychologist, Dr. Muriel Fuller at UCLA, to help myself with creative imagery and to stay mentally focused. I'm usually thinking about 2,000 things at once and I need to relax. I think (the therapy) is going to work.[22]

The 1985 season did not turn out too well for Salisbury. With two games left freshman Rodney Peete replaced him as starting quarterback. The creative imagery evidently did not "work wonders" for Salisbury, though practicing it might have benefitted him more than if he had performed no mental training at all. But, the '85 season cannot be replayed, so all we can do is speculate.

Mental Preparation for the Rose Bowl

Arthur Ellen, in *The Intimate Casebook of a Hypnotist*, tells some stories about hypnotizing players before their appearance in the Rose Bowl. Though a Los Angeles area resident, Ellen tried to be even-handed in the way he conducted the hypnosis sessions with players from the two opposing teams. He says, "I avoided post-hypnotic suggestions about winning—which, incidentally, are not necessarily effective." Nonetheless, when he hypnotized the UCLA and Michigan State teams prior to the 1966 game, Ellen's subconscious preference may have influenced his efforts. He confesses, "You may recall that UCLA stunned the experts by winning—14 to 12—and I wonder now whether local pride made me work a little harder on the California team."

The University of Illinois football team, based on outward appearances, seemed to have their mental preparation in order for the 1984 Rose Bowl. Sports psychologist Dan Smith worked with the team all season, arousing the interest of Stan Isle of *The Sporting News*. Isle reported a week before the game that Smith "has University of Illinois athletes working on a psychological skills training program, using mental imagery, goal-setting, and other methods to help them relax, gain self-confidence, improve concentration and perform better in game situations."[23] The sports psychologist, formerly an assistant basketball coach at Illinois, apparently taught these methods to the basketball team, because Isle related that "his (Smith's) success with Coach Lou Henson's 1982-83 basketball team convinced football Coach Mike White that Smith should work with the Illini gridders." As a result, the university changed Smith's assignment to that of a full-time sports psychologist. Continued Isle, "The Illini football record (10-1, with the team headed for the Rose Bowl as Big Ten Conference champion) and the unbeaten Illini basketball team (8-0 going into Christmas) stand as testimony to Smith's contribution."

Orange County Register reporter Steve Grimley added more details about the sports psychologist's work with the Illinois football squad, informing us:

Smith employed techniques to try and help Illini players to relax during game situations. Among those who claim Smith has helped them are wide receiver Mitchell

Brookins, quarterback Jack Trudeau, All-American defensive tackle Don Thorpe and punter Chris Sigourney. Eighty percent of the players used Smith's services, White said.[24]

One is interested in knowing how the players managed to relax during game situations, because this is an extremely useful capability for athletes to possess. According to Grimley, Smith devised a "trigger" for the players, one reminiscent of the "triggers" Dr. Ravizza created for the 1984 U.S. Olympic Field Hockey team (see Recent Developments in Sports Psychology and Mental Training chapter). The trigger the Illinois sports psychologist chose was a color—perhaps the *wrong* color. Grimley made a thought-provoking observation about this, saying before the game:

If Smith's relaxation techniques really do aid relaxation, the Illini should be really loose today. The color Smith randomly selected at the beginning of the year to trigger relaxation was light blue. . . UCLA's jersey color.

The 1984 Rose Bowl turned out to be one of the most lopsided affairs ever, with UCLA crushing Illinois, 45-9. Smith came up with several excuses explaining why the team performed so poorly, with his first excuse, as reported by *UPI*, dealing with pre-game chaos:

The atmosphere those last 48 hours was all wrong, and was totally unlike anything we had ever been through. Families were actually holding reunions with their sons, and one of the players told me, "I didn't know my aunt was coming; I hadn't seen her in years." It was totally out of the control of the coaches.[25]

The situation may, in fact, have been "out of the control of the coaches." However, one wonders what the hired sports psychologist—the supposed expert in such matters—did to prevent the distractions from occurring. Maybe he was powerless to intercede.[26] Perhaps, though, he was convinced of the effectiveness of his mental training program (after all, the team was 10-1), and felt that the players would play well, despite any pre-game family reunions and other disruptions.

Smith then offered another reason for the debacle:

First of all, you tend to tense up when you attempt to prepare mentally at the last moment. We were very tense, while UCLA came in relaxed, having slept in their own beds and many of them driving their own cars and coming to their own field. It was a perfect setting for an underdog team.[27]

The sports psychologist's remarks about the players tensing up "when you attempt to prepare mentally at the last moment" is quite puzzling. The Illinois football players, under Smith's guidance, had been practicing imagery, working with a trigger, and performing other mental training *all season*. Now suddenly, the sports psychologist raises the argument that "last moment" mental preparation proved counterproductive and ineffective. Mental training was not new to the Illinois players. Any game day mental rehearsal session, therefore, should have been old hat to them, and not caused them "to tense up," as Smith contends.

The sports psychologist does not refer to the trigger situation Grimley highlighted. One would think that looking *all game* at one's trigger to relax—unavoidable because light blue, UCLA's jersey color, was the trigger—might prove highly detrimental. *Occasional* use of a trigger during a game situation has yielded impressive benefits in many cases, but one questions the appropriateness of constant viewing of the trigger. Players placed in such a situation conceivably could find themselves continually preoccupied with trying to achieve a relaxed state, rather than concentrating on playing the game. If a color is to be used as a trigger, it seems that a color not worn by the opposing team would be preferable. The players could glance at such a color *as needed*, instead of having to always be confronted by the trigger.

We recall Dr. Eugene Gauron's mental training work with the University of Iowa athletes

(refer to Swimming chapter and Amateur Athletes chapter). One of the athletes he helped out was Gordy Bohannon, quarterback of the 1981 Big Ten champion Iowa football team.

A very nice and informative testimonial by Bohannon appears in the Preface to Dr. Gauron's book, *Mental Training for Peak Performance*. The Iowa quarterback stated in part:

I decided to work with Gene twice a week. His services are available to all sports at Iowa. The primary emphasis in our initial meetings was on relaxation and visualization training. We first got my body to relax completely by deep rhythmic breathing, and once the body was relaxed, my mind was very open to suggestion. It was important for me to be able to tell myself these suggestions and not have to depend on someone else.

One day in July (1981) when we had achieved this state of mind, Gene asked me to visualize the front page of a newspaper. My visualization resulted in this headline: "Bohannon leads Iowa to Rose Bowl." I continued this exercise daily until I felt confident about it becoming a reality.[28]

Bohannon describes in detail what he pictured in his mind during the visualization sessions; such things as "the defensive secondary in different positions on the field," "feelings I would be experiencing during a game," "jersey numbers," and so on. A game day visualization session always took place, lasting from 30-45 minutes. "The main purpose of the game day meeting," noted Bohannon, "was to visualize a positive outcome. This developed confidence because I then expected to do well."

The visualization worked for Bohannon, as far as he took it. Iowa defeated Michigan State to earn the Rose Bowl berth, but for the Iowa quarterback this victory was like reliving history. He recalls:

The feeling after the game was unusual. It seemed like a *deja vu* because I had visualized this outcome so frequently. It seemed strange to pick up a newspaper which had my picture on the front page with a rose in my mouth. The caption read, "Hawkeyes to Rose Bowl." Amazing how close my visualization came to the actual reality.[29]

Unfortunately, Bohannon experienced a harsher reality in the 1982 Rose Bowl game. Iowa lost to Washington, 28-0. The Iowa quarterback blamed himself for not setting "my goals high enough. I never saw us *winning* the Rose Bowl. My goal was just getting there. Once my goal had been attained there was no motivation to keep performing at a high level." In the next chapter (Recent Developments in Sports Psychology and Mental Training) the importance of proper goal-setting is discussed at length. *Bold* goals, such as "win the Rose Bowl," or "go through the season undefeated," generate motivation and interest, especially for elite level athletes; more easily attainable goals tend not to inspire athletes so much. Bohannon, therefore, diagnosed his mistake perfectly, and also prescribed the correct remedy, commenting: "If I had to do it over again, I would have set goals including the outcome of the bowl game." [30] This insight is similar to what Lisa Vogelsang realized halfway through her discus competition at UC Irvine (see Track & Field chapter). It dawned on her that her autosuggestions had not specified that she throw a PR "in the meet," an oversight she rectified for subsequent competitions. When you engage in mental training, what seems to be a minor or hypothetical detail—one of those things which can be dealt with "if and when"—can develop into something major later on in the season. So, be careful when you set your goals not to limit yourself or omit critical steps.

The 1985 Iowa football team also found themselves on their way to the Rose Bowl. However, Coach Hayden Fry, recalling his team's 1982 experience and undoubtedly seeing what happened to Illinois in the '84 game, opted to keep his players home until December 26th. On the previous visit the team had arrived on the 19th, with bus trips to tourist attractions, fancy dinners, and V.I.P. treatment occupying much of their time. Remarked Fry: "You name it, we did it. If we

missed any of the places around here, I wasn't aware of it.”[31] The Iowa coach found the constant entertainment quite distracting, and decided the second time around to test the theory that his players could concentrate on the game better if they practiced more days at home and then, after arriving in Pasadena, avoided most of the hoopla. He observed:

Whether or not it's important (to stay home longer), I don't really know because they don't let me play. But assuming that it is, we're going to practice at home, then come out here for four days of workouts and see what happens.[32]

It would be interesting to learn what role Dr. Gauron played with the '85 team; one suspects he was involved in some way. Meanwhile, Iowa's opponent, UCLA, was conducting a partial **simulation** of playing conditions during their workouts. Dave Strege of the *Orange County Register* reported that “during most of the pre-bowl practices, the Bruins have been running a crowd-noise drill by piping in tape-recorded crowd noise. It's a drill they've been doing all season.”[33] Simulation is a useful technique for athletes and coaches to employ. It helps make the actual competition familiar and more like a workout (where commonly little stress is experienced). Coach Terry Donahue of UCLA was smart to run the crowd-noise drill all season; it was not something he suddenly introduced after the team earned a Rose Bowl slot, making it some new element for the players to adjust to. Instead, the simulation was a standard feature of UCLA's practices. One has to believe that other football teams could benefit from acclimating their players to game conditions (via simulation).

The '86 Rose Bowl game saw UCLA playing well again, and winning, 45-28. Iowa's mental preparation may have been as thorough and as focused as possible; if so, this only underscores the point that mental training cannot win games by itself. There is an opponent, for one, to deal with. If the opponent does not cooperate, but instead plays with intensity and confidence, anything can happen, as UCLA aptly demonstrated to Iowa.

Personality Tests

One question I asked Kevin McLain in 1977 was whether or not the Rams coaching staff had ever had the team take a psychological test. He said that the coaches had never done this. But, psychological testing has been conducted on players on other professional teams. For example, Dr. Thomas Tutko, the *Sports Psyching* author and founder of the Institute of Athletic Motivation, acknowledges that in 1963 the Dallas Cowboys took a personality test developed by his institute. Called the Athletic Motivation Inventory test, it reputedly measures these traits: Drive, Aggressiveness, Determination, Guilt Proneness, Leadership, Emotional Control, Self-confidence, Mental Toughness, Coachability, Conscientiousness, and Trust. *Theoretically*, the results of this test would help the coaching staff make better decisions regarding the players; such as, position assignments. The coaches would also gain a deeper understanding of their players, which hopefully would lead to greater rapport—once again, theoretically.

This test, however, proved fallible. Dan Lauck, writing in the June, 1978 issue of *Sky* magazine, reported that “Tutko's tests told the Cowboys that Lee Roy Jordan, their all-pro linebacker, was nonaggressive.”[34] Other profiles did not square with the facts, either, which clearly throws into doubt the value of such personality tests.[35] Further on in Lauck's report, it was pointed out that “Tutko says that his tests have been in agreement with coaches' impressions 87 percent of the time.”[36] This interesting fact would tell us more if we only knew how accurate coaches' impressions are. Assume that coaches' impressions are wrong most of the time; so, therefore, would be the test. Assume now that coaches' impressions are usually right; in such a case administering a personality test would appear superfluous. However valid and potentially useful personality tests are, professional football players for very legitimate reasons reacted negatively to having to take such tests, and they took action to stop the practice. The outcome, as Lauck noted, was this:

The National Football League Players Association included a clause in its latest contract with the NFL forbidding teams to give players psychological tests. "We thought it was an invasion of the players' privacy," says Ed Garvey, the executive director of the NFLPA. "And we feared that the knowledge would or could be used against the player in contract negotiations."^[37]

The University of Hawaii Football Team's Firewalk

Just about every folly under the sun has been committed in the name of motivating athletes, but the August, 1985 initiative of the coaching staff of the University of Hawaii football team falls in a class by itself. The Rainbows' head coach Dick Tomey hired the Robbins Research Institute to conduct a firewalk for his 120-man squad. Ferd Lewis, staff writer for the *Honolulu Advertiser*, in reporting the firewalk story, discovered that about \$2,000 "came out of the football team's total budget allocation for consultation fees" to pay for the firewalk, with the team receiving a special rate, as the normal fee was \$125/person.^[38] A five-hour seminar, given by Tom Robbins, head of the Robbins Research Institute, preceded the firewalk. According to Coach Tomey, "you get a lot more out of the seminars" than the firewalk. He continued:

The firewalk is just a symbol of what the seminar is all about. People hear about it and think the firewalking is the main event. It's the reverse.

... In fact, people can get the symbol imbedded in their minds by not even doing it (the firewalk) and that is the real message. You don't even have to walk the fire to share the experience. It is the seminar, the four or five hours in there with him (Robbins), that is the key thing.^[39]

Echoing Coach Tomey, Robbins explained to Lewis that "to walk on fire isn't the purpose or the extent of what we do. It is only a metaphor for what a person can do."

The firewalk, reported Lewis, took place "on a damp lawn fronting the women's physical education locker room," while the seminar, held in a nearby meeting room, began "at 8:30 p.m. and built steadily upward to a wild crescendo at 1:30 a.m. when the firewalk took place in semi-secrecy." Over 90% of the players and coaches, relates the *Advertiser* writer, "made at least one pass down the flickering runway," and none of the participants incurred any injuries.

The football players came out of the session on a super high. Hawaii's quarterback Greg Tipton could hardly contain himself, telling Lewis:

It was incredible, the most incredible thing you can imagine. I mean, a lot of us were skeptical and had our doubts at first, but wow.

. . . As a Christian, I pictured it as a satanic ritual. Fire and satan went together in my mind. (But) Satan was nowhere to be found. What I found was the potential within myself to do things I've never dreamed of.^[40]

Fullback Nuu Faaola also lauded the seminar and firewalk, stating:

It was an experience I'm going to keep with me for a long time. It's something that I know will help me in football and my life.

Defensive tackle Colin Scotts provided important details about Robbins' talk. It appears that the players were led through a visualization session.^[41] Recalled Scotts:

First they played some soft music that relaxed us and cleared our minds. Later, he (Robbins) asked us to test our minds and picture ourselves doing different things to the best of our ability. Then, he asked us to place that thought in the upper corner of our minds. He asked us to bring it back and then picture it in black and white.

(Soon) we began to believe in ourselves and our abilities. We were telling ourselves, "I can do it, I can do it... I'm the best." We hugged each other and reinforced each other. It was really something to see and feel.[42]

Eventually, it came time for the players to do the firewalk. The defensive tackle asserted:

There was nothing that was going to stop us. It was the most amazing thing that's ever happened to me.

Now, I know there's nothing we can't do as a team if we put our minds to it. I can't wait until the game with Kansas (Aug. 31 at Aloha Stadium) to put it to use.[43]

Richard Diehl, the manager of Robbins' business in Hawaii, found himself in complete agreement with the Hawaii football players. He told Lewis:

That was my 40th time (at a seminar) and I've never seen anything like it before. They (the football players) were much more intense than the other groups we get.

I think we'll see an enormous shift in the football team this season from last year (when UH was 7-4).[44]

University of Hawaii Athletic Director Stan Sherif, meanwhile, was asked by Lewis if he would have taken his players to such a happening in the days he was head football coach at the University of Northern Iowa. He responded, "I might have if they had it then, especially the season we went 4-6."[45]

Coach Tomey proclaimed the seminar and firewalk "a very educational thing that will help our players and staff." Of course, after spending \$2,000 on the event, one could hardly say anything else. He went on to remark that "it will help our players in the classroom, personal life and may even help us as a team, although we have no delusions it will make us a great football team."

With everyone essentially singing the praises of the seminar and firewalk session, it only remains for us to see how the University of Hawaii football team fared during the 1985 season. No doubt they defeated Kansas in the season opener at home, right? **WRONG!** Despite the seminar and firewalk being held only a few weeks previous, and players such as Colin Scotts saying "I can't wait until the game with Kansas to put it (the firewalk experience) to use," Kansas won, 33-27.

Certainly, though, the team improved upon its 7-4 record of 1984, right? Dead wrong again. Richard Diehl's prediction that "we'll see an enormous shift in the football team this season from last year" proved correct, but in the *opposite* direction from what he intended! Hawaii finished with a mediocre 4-6-2 record. Recollecting Athletic Director Stan Sherif's "especially the season we went 4-6" comment, one wonders if he urged Coach Tomey to arrange another firewalk as the season progressed. Or did it perhaps hit Sherif that the nighttime spectacular might have proven counterproductive, instead of being, as nearly everyone exalted, "the most amazing thing."

The problem with such things as firewalks, which produce in the participants a super emotional high, is: how do you *maintain* that high feeling over a few days period, let alone over the course of a season? Frankly, it is impossible. Nor is it advisable. Each athlete's optimal level of arousal (emotional excitement) differs from another's. And, optimal arousal level is something which only objective tests conducted on an individual basis can accurately determine. Because many athletes perform better at a low level of arousal, it is best not to get them too charged up. In fact, Dr. Robert S. Weinberg, in his paper "Mental Preparation Studies" (contained in *Psychological Foundations of Sport*), warns about "preparatory arousal" hurting the performance of quarterbacks, receivers, and other players occupying "skill" positions where strength moves are rarely required (see Recent Developments in Sports Psychology and Mental Training chapter; also refer to this same chapter and the Swimming chapter for further discussions of arousal). So, football



(Honolulu Advertiser photo)

The coaching staff of the 1985 University of Hawaii football team, thinking they had hit upon a great motivational tool, had their players attend a pre-season firewalk session (preparations are seen here). Unfortunately, the players found walking over the hot coals easier than defeating their opponents, as they lost to Kansas in the season opener, and finished 1985 with a 4-6-2 record.

coaches should think twice before plunging ahead with schemes to “super psych” their players.

The firewalk definitely turned out to be the “very educational thing” Coach Tomey described it as. It shows us to avoid situations which might raise everyone’s expectation levels too high.[46] The comments of the Hawaii players indicate that the firewalk had greatly raised their expectations about what they could do as a team. When the Rainbows were unable to win their first game against Kansas, the “metaphor” of the firewalk probably exploded in many of the players’ minds. It’s extremely difficult to pick up the pieces and regroup when one’s high expectations are shattered. The Hawaii football team, as their 1985 4-6-2 record illustrates, found this out.

Having offered constructive criticism of the firewalk affair, I propose an alternative way for coaches to spend \$2,000 on their players’ mental preparation:

1. Each player should be provided *a book on mental training* for athletes (there are several books available).

2. Each player should be given one or more *mental training tapes*. Ideally, the tapes should be tailored to the position of the player. To accomplish this, the athlete, coach, and/or sports psychologist may choose to collaborate on an appropriate script. In lieu of this, mental training tapes of a general nature can be obtained.

3. The coach should learn and become adept at various mental training strategies so he can teach and work with his athletes on visualization, self-hypnosis, and other useful mental disciplines. He should allocate sufficient funds for his own education in mental training.

If any money is left over, a sports psychologist may be hired to provide additional assistance. It is best, though, for athletes and coaches to be their *own* sports psychologists.

Professional Football and Sports Psychologists

At the professional football level it appears that sports psychologists have not played as great a role as they have in some college football programs. One reason for this is because sports psychologists are generally members of a college faculty, and as “insiders” possess easy access to the coaching staff of their school’s varsity sports; with this accessibility comes the greater likelihood that the “insider’s” services will become known to the coach and ultimately be made an integral part of the athletic program. By contrast, the sports psychologist is usually an outsider to the professional team; he is more likely, if his services are accepted, to be treated somewhat like a consultant, and not really be made part of the coaching staff. For example, we are informed by *L.A. Times* writer Beth Ann Krier that Dr. Bruce Ogilvie, the sports psychologist whose work is discussed in the Track & Field and Professional Athletes chapters, “has consulted with such teams as the Dallas Cowboys. . . (and) San Francisco 49ers.”[47] We are not told in what year(s) Dr. Ogilvie’s consulting work occurred with these teams, but with the 49ers it does not seem to have happened under Bill Walsh’s tenure as Head Coach, assuming what appears in Bud Winter’s *Relax & Win* still holds true. Walsh, who coached the 49ers to three Super Bowl championships during the ’80s, was asked by Winter: “Do you know anywhere, in amateur or professional football, where a course in relaxation [self-hypnosis] is taught to individuals or teams?” Walsh’s answer was this: “No, but I have heard of a number of people interested in organizing such a course.”[48] Winter, whose book appeared in 1981, asked the same question to Dick Vermeil, then the Head Coach of the Philadelphia Eagles, and he replied, “I do not know of a professional football team that formally teaches relaxation to individuals or groups of players.”[49] Based on available evidence, these answers are fairly representative of what other coaches involved in the sport at the time would say. The word “sporadic,” then, best characterizes the use to which professional football teams made of sports psychologists during the 1970s and early 1980s.[50]

Although Walsh knew in 1981 of no formal mental training courses or programs being taught to professional football players, he and his coaching staff to some degree encouraged his players to practice visualization. Stated Walsh: “We (coaches) also have the athletes visualize carrying out a particular skill. Just as in a hurdle race, you might visualize going over each hurdle mentally just before a race, we like to have the quarterback visualize taking the ball, going back for a certain number of steps, reading the defense, then throwing the ball to a receiver.”[51] Exactly how the 49ers went about practicing visualization Walsh did not reveal to Winter, but it appears that those players who visualized did so rather loosely, and certainly were not participants in any formal mental training program.

In 1983 *USA Today* correspondent Susan Fornoff reported that “Dr. Francis Lodato, a teaching psychologist at New York’s Manhattan College, uses ‘progressive relaxation and visual imagery’—safer-sounding pseudonyms for hypnosis—to help coaches of the Canadian Football League’s Montreal Concordes get their messages across.”[52] Fornoff did not go into details about Dr. Lodato’s work with the Concordes, nor describe the quality of the team’s coaches and

players. What we do know from an examination of the records is that the Concordes finished last in the CFL's Eastern Division in 1983 with a 5-10-1 record, and in 1984 were 6-9-1. The one thing in Fornoff's story which stands out is where she correctly calls progressive relaxation and visual imagery "safer-sounding pseudonyms for hypnosis." Many sports psychologists, in order to attract as many customers as possible, drop all references to "hypnosis" when describing the techniques they teach athletes. By claiming to teach "visual imagery" and so on—instead of hypnosis—sports psychologists adopting this marketing approach are able to distinguish themselves from hypnotists, whose services are widely available and essentially the same, while also coming across as offering the latest in "safe and effective" mental training methods. I mentioned elsewhere this tendency on the part of sports psychologists to substitute other names for hypnosis (see related discussion in Recent Developments in Sports Psychology and Mental Training chapter), but only bring the subject up again to emphasize the caution you might be wise to exercise should you decide to seek the services of a sports psychologist. The sports psychologist who denies that he teaches hypnosis, while at the same time asserts that he teaches imagery, "self-talk," and the like, is perhaps not the best person to go to or hire. This is because either: 1) he is deliberately handing you a line, which is a poor start for one who supposedly is trying to establish rapport (trusting relationship) with you, or 2) he is really not that much of a mental training expert, and does not comprehend that there are few, if any, substantial differences between hypnosis and other mental rehearsal techniques.

Los Angeles Rams

For the 1985 season the Los Angeles Rams hired Saul Miller to act as a team psychologist. Much publicity was generated about this before the regular season began, but nothing about Saul Miller's work with the Rams appeared in the press from then on. After Los Angeles lost to the Chicago Bears in the NFC Championship I endeavored to determine more about this situation.

Already a matter of record was the way Miller planned to help the players. *Orange County Register* writer Michele Himmelberg related that "with various techniques—such as breathing, imagery and positive-attitude reinforcement—Miller said he can 'flush out... (a) negative feeling and tune in a new feeling.'"^[53] The sports psychologist pointed out to Himmelberg one possible instance where the application of such techniques could prove beneficial:

Say a quarterback is pressing. In a crucial situation he may say to himself, "Oh no, don't throw another interception." With that comes an automatic tensing of the body. Then he may take longer to throw the ball, or he may lose some of his peripheral vision.^[54]

Himmelberg also reported that Head Coach John Robinson practiced "relaxation and mental imagery... techniques suggested by the Rams' new sports psychologist, Saul Miller."^[55] She went on to describe how the Rams' coach practices these techniques:

. . . John Robinson is resting in a well-stuffed chair. His office door is shut, his eyes are closed and his chest is rising and falling in a steady rhythm.

Robinson is not loafing on Los Angeles Rams' time. He's taking what truck drivers call a "power nap." With a few minutes of relaxation, Robinson can be rejuvenated for hours.^[56]

In June, 1986 I asked Coach Robinson some questions about Saul Miller's contribution to the Rams' program. Robinson started with himself as an example, stating to me:

I have used positive imagery extensively to relax and to improve my concentration. What Saul Miller has done for me is help me control my brain. There are times when I can't stop my brain, can't shut it off, just so I can relax; I have to be able to stop what's

going on when I feel hassled.

As complicated and stressful as football is for players, a football coach must handle an even greater quantity of details, plus personnel problems (never fun to deal with); therefore, as Robinson's account illustrates, the coach's own needs for mental relaxation and ways to enhance concentration cannot be ignored.[57]

Although Saul Miller served as the Rams' team psychologist, and did so again for the 1986 season, a mental training program for the entire team was not implemented. No team visualization or hypnosis sessions were conducted; the players did not receive mental training books, though Miller did make a customized tape for one player. Said Robinson, "it was voluntary" anyone's wanting to see Miller and try out particular mental rehearsal techniques. The best estimate the Rams' coach came up with was that 12-15 players sought the services of the team psychologist. Saul Miller, he continued, was "treated as another employee, as another avenue for our players—not unlike the trainers." To Robinson having the psychologist around made sense because of the importance the mental component plays in football. He noted that "teaching (fundamentals) and the physical skills, the weight training and the diets, have all progressed in the last 20 years. But, the psychological aspect to performance has been the least developed phase." As for each player acting as his own psychologist, Robinson considered this advisable and definitely possible; it is simply a matter of "acquiring the knowledge like anything else and applying it on a daily basis."

Rams cornerback LeRoy Irvin was one of the 12-15 players who visited Miller, and kindly volunteered a testimonial about what the psychologist did for him. Informed Irvin:

My major problem throughout my career has been consistency. Saul got into my inner self. He developed the "wave" for me, got me watching (beach) waves (in my mind) time and again—you know, they're so constant and consistent. He even made a tape for me. He is very low-key and doesn't bother me a lot. I think more guys in the future will go to the psychologist because he does have the expertise to assist our minds.

LeRoy Irvin ended up being chosen All-Pro in 1985, an honor which comes about from playing high quality football *consistently*. The example he set of improving his mental game is one any athlete, let alone other members of the Rams, can easily follow.

One final matter, unrelated to Saul Miller's activities, I asked Coach Robinson about. Did the Rams, I inquired, conduct any simulations during practice, such as the one UCLA football coach Terry Donahue has his players undergo (trying to play while a crowd-noise tape blares). Robinson replied that he has his players practice one which is the opposite, though similar in intent, from the crowd-noise drill. What the Rams do is run plays in total silence. The quarterback will mouth or whisper the snap count. It can be seen that one's senses will be fine-tuned by practicing such a drill. Visual cues, normally not relied upon, become further developed; also, one's inner sense of when the snap will occur is heightened. All this helps whenever a noisy stadium situation is encountered, and it becomes impossible to hear the quarterback.

New England Patriots

In determining the degree to which pro football players use mental training strategies and the services of sports psychologists, perhaps the old saying—"there is more than meets the eye"—best portrays the current state of affairs. A case in point: after years of what he called "observing the strictest professional confidentiality," Dr. Armand Nicholi revealed in 1987 details about his work as team psychiatrist for the New England Patriots, something the public could not suspect was going on because they had not been provided any information about the activity. The remarkable, and lengthy, revelation appeared in the April 23, 1987 issue of *The New England Journal of*

Medicine (see “Psychiatric Consultation in Professional Football”). Dr. Nicholi noted that during the 1985 season, a season in which New England made it to the Super Bowl, the team came “under intense scrutiny from the media, and the news leaked out that the Patriots had a psychiatrist working with them.”[58] Prior to the leak, Dr. Nicholi’s work with the Patriots, which began in early 1982, had been under wraps. The secretiveness, according to the psychiatrist, enhanced his effectiveness in assisting the players, coaches, and management; or, in Dr. Nicholi’s words, “the less known about my work, the better.” But, with the cover blown, and given the trend of athletes in all sports being increasingly exposed to mental training, the psychiatrist no doubt figured that relating his experience might contain some enlightenment value.

Dr. Nicholi described the tasks he engaged in and, as of 1987, still performed for the Patriots:

- (1) providing individual therapy for emotional problems that interfere with athletic functioning;
- (2) establishing a drug-use prevention program involving educational lectures, testing, and rehabilitation;
- (3) teaching techniques to program the mind to achieve peak athletic performance;
- (4) meeting with players in small groups to resolve difficulties that impair team performance;
- (5) working closely with the general manager, the coach, and the players to remove longstanding obstacles between them and to help them relate to one another more effectively; and
- (6) meeting with team members before a game to help prepare them psychologically for competition.[59]

Task #3, we observe, involved “teaching techniques to program the mind to achieve peak athletic performance.” Specifically, Dr. Nicholi blended Dr. Suinn’s visualization method (see Amateur Athletes chapter) with Herbert Benson’s meditation-like “relaxation response” and self-developed psych-up methods of some of the players on the team. The resulting concoction, reported the psychiatrist, seemed to help several of the Patriots perform better. One reserve running back, identified by David Wessel of the *Wall Street Journal* as Robert Weathers, “says he heeded Dr. Nicholi’s advice to imagine performing the perfect technique. Mr. Weathers,” continued Wessel, “scored a touchdown.”[60] The significance of Weathers’ touchdown run is that it occurred in a pressure situation. It happened, informs Dr. Nicholi, “in the last game of the 1985-1986 season, against the Cincinnati Bengals—a game that had to be won to enter the playoffs—“ (with) “the Patriots... hanging on to the lead with a score of 27-23 and less than two minutes to go in the game,” plus, it was “fourth down and inches to go on the Bengals’ 42-yard line.”[61] Clearly, it was a big play—perhaps a game and season decider. After the touchdown, the psychiatrist relates that Weathers came over to him and said, “Doc, you won’t believe this, but just before I went into the game, I visualized myself running that very play over and over again. When I got into the game, I ran it step by step just as I visualized it.” The essence of this unique testimonial is probably accurate because when contacted by Wessel, Weathers remarked, “I’ve paid a lot more attention to what Dr. Nicholi has had to say since then” (the touchdown).

The other five tasks the psychiatrist discusses at length certainly are important in raising team morale and generating maximum effort from all parties. But, significantly, Dr. Nicholi claims that his “work in helping them [the players] prepare mentally for competition may have been the most helpful” task. This outlook—that is, the recognition of the overriding importance of the athlete engaging in mental rehearsal activities prior to and/or during competition—has been seconded countless times throughout this book by other authorities. Hopefully, you will adopt this perspective in striving to achieve your own goals, be they in sports or life in general.

Another point worth repeating is that having a team psychiatrist on the payroll does not guarantee a winning record, let alone a championship. The Patriots did *not* win the 1986 Super Bowl; they were blown out by the Chicago Bears, 46-10. Still, being unable to win the championship does not mean you fire the psychiatrist. Such a person is no miracle worker. Instead, his contribution to the team must be judged in the same light as the services rendered by other staff members

(i.e., coaches and trainers). In the case of Dr. Nicholi, Michael Loftus, a Patriots spokesman, told Wessel, "I certainly wouldn't blame that (the Super Bowl loss) on him," and in line with this reasonable viewpoint, the psychiatrist's services were retained. The retention qualifies as an appropriate move by New England's management because negative factors, such as injuries or going up against an opponent possessing superior talent (situations no athlete can avoid forever), will sometimes overwhelm the beneficial impact of proper mental preparation and feelings of team unity; in fact, with so many interacting variables present one often is at a loss to explain a defeat. This complexity being the case, we are therefore compelled to keep in mind the old saying that began this section—"there is more than meets the eye"—in assessing the role mental training plays nowadays in the life of professional football players.

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It is said that models are always more effective and valuable than mere rules. For this reason we highlighted in this chapter the experiences many football players have had with various mental training strategies. Most of these athletes practiced mental techniques on a regular basis, and in general saw their performances improve as a result. The performance benefits, however, did not come at the expense of inconvenience. As Jack Youngblood, who often engaged in visualization while driving, observed in *The Winner's Edge*, "You can practice what you want to do even when you can't go through it physically." So, tackle some mental discipline and stick to it; by so doing, you will not inconvenience yourself, but even more importantly, you just might experience a complete conversion for the better as an athlete.

FOOTNOTES

1. "Jim Marshall Retiring Already," *Los Angeles Times*, December 5, 1979, Part III, p. 4.
2. Herbert Benson, *The Relaxation Response*, (New York: Avon Books, 1975), p. 174.
3. Zacariya Ar-Razi, *A Treatise on the Small-Pox and Measles*, (London: Sydenham Society, 1848), pp. 165-166.
4. Dan Lauck, "The Science of Psyching," *Sky* magazine (published by Delta Air Lines), June, 1978, p. 23.
5. *Ibid.*, p. 22.
6. John Strege, "Kicked Around," *Orange County Register*, January 17, 1985, p. E4.
7. *Ibid.*
8. *Ibid.*
9. Chuck Abair, "Steinke Kicks 51-yarder to Lift Titans and Leave Boise State in a Trance," *Orange County Register*, September 4, 1983, p. D1.
10. John Weyler, "Greg Steinke Is in No Hurry," *Los Angeles Times*, September 22, 1983, Part III, p. 10.
11. *Ibid.*
12. "'Hypnotic Coach' Is Forum Speaker," *Fullerton Chamber of Commerce Business Review*, May, 1983, p. 1.
13. David Osterman, "Getting His Kicks," *Orange County Register*, October 5, 1983, p. C1.
14. *Ibid.*
15. "Morning Briefing," *Los Angeles Times*, October 13, 1982, Part III, p. 2.
16. Bob Oates, Jr., *The Winner's Edge*, (New York: Mayflower Books, 1980), p. 58.
17. *Ibid.*, p. 160.
18. *Ibid.*, p. 172.
19. "Rams Win One for Injured Haden," *Fullerton News Tribune*, October 12, 1981, p. A5.
20. In late September, 1979, I encountered a frustrated 12-year-old boy, Jeff Gillespie, who was practicing field goals—and not making too many of them. Gillespie had just been promoted to field goal kicker on his Pop Warner team, the Fuller-

ton Rams, and was extremely anxious to do well. His workout was not going the way he wanted, however. Von Schamann's experience came to mind, and I thought a small mental boost was probably all the boy needed. I told Jeff, "I want you to try a little drill. Close your eyes for thirty seconds, and visualize the ball going through the uprights. Just think of how the ball should be kicked." The boy did this, opened his eyes, and began kicking perfect, high-arched field goals. Needless to say, Jeff was elated by this turnaround in his kicking performance. The lesson is, if a 12-year-old boy can learn and successfully use a simple visualization drill, any of us, from the young to the old-timer, can do the same.

21. Steve Grimley, "Salisbury Sharpens Focus on Football," *Orange County Register*, August 23, 1985, p. F13.
22. Mal Florence, "Salisbury Has Task to Finish at USC," *Los Angeles Times*, August 22, 1985, Part III, p. 1.
23. Stan Isle, "Illini Secret: All in the Head," *The Sporting News*, January 2, 1984.
24. Steve Grimley, "The California Connection," *Orange County Register*, January 2, 1984, p. D15.
25. "Activity De-activated Illini—Sez Here!" *Fullerton News Tribune*, January 10, 1984, p. 2B.
26. This seems to have been the case. Informed Smith, "I told Mike it would be great to slip away the last 48 hours and avoid all those distractions. But we have a contract with the hotel, so legally we can't."
27. "Activity De-activated Illini—Sez Here!" *op. cit.*
28. Eugene F. Gauron, *Mental Training for Peak Performance*, (Lansing, New York: SportScience Associates, 1984), p. ii-iii.
29. *Ibid.*, p. iii.
30. *Ibid.*
31. Dave Strege, "Fry Leaves the Hawkeyes Home," *Orange County Register*, December 7, 1985, p. D7.
32. *Ibid.*
33. Dave Strege, "Stevens to Start at Quarterback," *Orange County Register*, December 30, 1985, p. D5.
34. Lauck, *op. cit.*, p. 24.
35. Lauck mentions that the Phoenix Suns once had their players take psychological tests. He informs us: "The report on one player described him as coachable, caring, well disciplined, selfless. 'At the time,' said a man in the Suns' organization, 'he had run about three coaches out of the NBA.'" Tossing out another barb, Lauck relates that "the very successful head coach of another NFL team was profiled as 'not a good leader.'"
36. Lauck, *op. cit.*
37. *Ibid.*
38. Ferd Lewis, "Strolls Through Coals Leave 'Bows Fired Up," *Honolulu Advertiser*, August 14, 1985, p. A-1.
39. *Ibid.*
40. *Ibid.*
41. What can be called hypnosis made its presence felt during the firewalk. Lewis reports that as the players performed the firewalk, they were "urged on by the upraised fists and chants of their teammates—chants of 'cool moss, cool moss.'" The repetitious chanting of "cool moss," being directed at individuals in a susceptible state of mind, had the impact of a hypnotic suggestion.
42. Lewis, *op. cit.*
43. *Ibid.*
44. *Ibid.*
45. *Ibid.*
46. Dr. Unestahl's remarks on how to handle and control expectation levels are quite instructive (see Recent Developments in Sports Psychology and Mental Training chapter).
47. Beth Ann Krier, "Olympians Exercising in Mind Arena," *Los Angeles Times*, June 7, 1983, Part 1, p. 1.
48. Bud Winter, *Relax & Win: Championship Performance in Whatever You Do*, (San Diego, California: A. S. Barnes, 1981), p. 223.

49. Ibid., p. 234.
50. Dr. Nideffer, in *The Inner Athlete*, mentions his being invited in 1973 to speak to the Buffalo Bills during one of their mini-training camps. "I had been asked," he recalls, "to talk to the team to give them ideas about what they could do to get ready mentally for the coming season. When (Coach) Lou Saban introduced me, he emphasized to the players that I was there because they were thinking men, not animals." There is little more to this story, and one does not get the impression that Dr. Nideffer worked with the Bills throughout the season.
51. Winter, *op. cit.*, p. 229.
52. Susan Fornoff, "Hypnosis Moves Onto the Diamond," *USA Today*, June 30, 1983, Section C, p. 1.
53. Michele Himmelberg, "Mind Games," *Orange County Register*, August 20, 1985, p. C1.
54. Ibid.
55. Michele Himmelberg, "Head Start: Psychological Tests Help Evaluations," *Orange County Register*, August 20, 1985, p. C7.
56. Ibid.
57. Dick Vermeil shared some thoughts along these lines with Bud Winter in *Relax & Win*. Said Vermeil, "I think there is room for it (a mental relaxation program), especially for coaches. I am one who really needs to learn to control my intensity level, my own emotions, and I'm sure a course that was well organized would help me."
58. Armand M. Nicholi, Jr., M.D., "Occasional Notes — Psychiatric Consultation in Professional Football," *The New England Journal of Medicine*, April 23, 1987, Vol. 316, No. 17, pp. 1095-1100.
59. Ibid.
60. David Wessel, "Is This the Same Guy Who Helped the Red Sox in the World Series?" *Wall Street Journal*, April 24, 1987, p. 37.
61. Nicholi, *op. cit.*

MENTAL TRAINING STRATEGIES TIME LINE (RECENT DEVELOPMENTS IN MENTAL TRAINING)

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Mental Training Sessions

(Coach Bud Winter taught "relaxation" to his San Jose State track and field athletes, who went on to capture many world records and gold medals; Dr. Schubert and Dr. Weinberg present similar imagery programs; a solid foundation provided by Dr. Unestahl's Inner Mental Training program, as evidenced by the successes of Swedish Olympians; mental training should be done on an *individual* basis, reasons Janis Donins; see Dr. Ravizza's work)

Music for Workouts

(To avoid monotony and improve performance, Work-up Music, Leading Music, and Quieting Music should be played during workouts, according to Kodzhaspirov's studies; comments of Ivan Lendl and John McEnroe)

Expect to Win

(Athletes perform better with this expectation in mind, say Patton and Ness)

Use of a Hypnotic Cue

(Dr. Unestahl; Dr. Ravizza taught U.S. Olympic field hockey players to regroup by looking at a "focal point")

Use of Imagery

(World gymnastics champion Boris Shaklin practiced this before each routine; Greg Louganis; California Angels pitchers use a "pre-pitch routine")

Studying Mental Training Books/Tapes

(Many are available, one good source being Human Kinetics Publishers; Dr. Nideffer and Dr. Unestahl urge coaches to be their own sports psychologists, while the author and Ed Arcaro emphasize that the athlete become such)

Mental Preparation for a Specific Competition

(Dr. Unestahl's Tape III contains instructions on activation, post-hypnotic suggestions, and mental rehearsal of the upcoming competition)

"Relaxation"

(Pole vaulter Dan Ripley employed Coach Winter's self-hypnosis method just before setting the world record)

RECENT DEVELOPMENTS IN SPORTS PSYCHOLOGY AND MENTAL TRAINING

During the last ten years the field of sports psychology has experienced many advanced developments, and much new information has come to light. The trend reveals mental training in particular gaining wider acceptance by sports participants because of: 1) ever-expanding and generally successful work with athletes by sports psychologists; 2) more books, articles, as well as audio and videotapes on mental training becoming available all the time, leading to a better informed clientele (the athletes and coaches); and 3) refinements and improvements in the practical application of mental training constantly being discovered and employed. In this chapter we shall look at some of these recent developments, concentrating on those of primary importance to the athlete.

The “Mental Training Gap” Reexamined

In our Soviet Athlete chapter we witnessed many charges that the U.S. Olympic sports program is years behind the Soviet Union in applying principles of sports psychology. Our athletes especially need more work in the area of mental training, say the critics. Interestingly, top U.S. track and field athletes for decades used “relaxation” (self-hypnosis) long before the critics appeared on the scene. A “mental training gap” did exist—with U.S. track and field athletes being way in front of the Soviets in applying mental disciplines!

In 1981 a remarkable book was published, *Relax & Win*, authored by the late Bud Winter, the San Jose State University track coach for 30 years. In this book Winter, the “king of sprint coaches,” detailed the mental preparation techniques he taught his athletes. The main mental discipline he promoted was “relaxation,” a way to overcome stress and tension which he first taught to U.S. pilots during World War II. Coach Winter briefly relates the ensuing history of this technique:

After World War II, all of the successful knowledge, testing, exercises and results of the relaxation course at Del Monte Pre-Flight were inculcated into our track program at San Jose State University. The results: thirty-seven world records. If you will pardon any reference to myself, I would like to point out the efficacy and good results we got from applying relaxation to a sport.

At one time, “little” San Jose State held every world record in the sprints from 50 yards through the 440 and a record in the 800-meter and 880-yard relays, and an American record in the mile relay. In the 1968 Olympic Games, athletes from San Jose State won more gold medals than the entire track team from Soviet Russia.

We preached relaxation from the time the athletes started their warm-up until they unlaced their shoes at the end of the workout. The commands “Take those wrinkles out of your forehead,” “loose jaw, loose hands,” and “drop those shoulders” echoed and re-echoed from the track stadium walls.[1]

As Winter points out, the Soviet track and field athletes won fewer gold medals during the '68 Olympics than just those U.S. track members who had attended San Jose State and learned “relaxation” while there. The critics have never mentioned this “unfair” situation, probably

because they are unaware of Coach Winter's work or they entertain a double standard (when U.S. athletes win, "everything is fine;" when the Soviets win, "their training techniques are light-years in advance of ours"). To be consistent one must note the performance of U.S. athletes under Winter's guidance as well as recent outstanding performances of Soviet and East German athletes, who presumably are now taught and regularly practice mental training strategies.

The "relaxation" technique Coach Winter taught his athletes contained two major components: 1) relaxation per se, and 2) a "mental set." The first component called for the athlete to progressively relax his body, from one muscle group to another. Winter guided the athlete at first, and then after six weeks or so, the athlete usually could carry out the relaxation on his own. An extract of the "relaxation" procedure Coach Winter presented to the athlete follows:

I want you to breathe *slowly* and *regularly*. As you exhale, breathe out your tensions. Sigh audibly if you wish. Now, let your jaw sag. Let it go more. If you do this properly, your jaw will drop open. Now, even relax your lips and tongue... If your jaw is relaxed, it is a good bet your whole upper body is relaxed... Now I want you to let go all the muscles that hold up your head. If you do this correctly, your chin will drop and touch your chest. Breathe slowly.

To get rid of all the tensions of your head and neck, drop your shoulders as low as they will go. Get them down there—lower. You should feel all the tensions go out of your neck. Don't try too hard, just let go. Remember to breathe slowly and regularly. As you exhale, drop your tensions.[2]

The second component of Winter's "relaxation" technique involves the creation of a so-called "mental set." In his book Coach Winter tries to make a fine distinction between "mental set" and giving oneself hypnotic suggestions, stating that "the compulsion to perform is not as strong as under hypnosis;" but, he does not back up this contention with any evidence. I personally believe that Winter's "mental set" is just another name for autosuggestion, and Winter himself admits that "mental set is allied to posthypnotic set." The San Jose State track legend discusses how one can create a "mental set":

To set your mind, you make up a short slogan that expresses the attitude in which you want your mind during a pressure situation. Then you get into as total a relaxation state as you can. When totally relaxed, repeat the slogan over and over, at least three or four times. For example, before an examination you might say:

"In tomorrow's exam, I will be cool and confident."

"Tomorrow I will be cool and confident all day."

... You see, when you are relaxed, your subconscious mind is very suggestible.[3]

For track athletes who will be running a race, Winter suggests that after they relax, they give themselves this "mental set" slogan (autosuggestion): "I am going to run fast and loose." He also urges athletes to develop a conditioned-reflex capability to deal with tense situations. The nervous athlete should repeat the word "calm" to himself, and, according to Coach Winter, "if you have practiced enough in associating this word with the relaxed state, you will be relaxed at once."

The San Jose State track team members were not forced to learn and apply Winter's "relaxation" technique. Their participation was voluntary, optional. States Winter:

At the start of the season, everyone who wants the relaxation course gets it. We do *not* make it compulsory. We make it something special. They have to *want* to get into the course. That way, they will cooperate. Then, of course, some do not need it, but they are very few.[4]

Every mental training program should allow for such freedom of choice, because personalities

differ, rendering no one mental discipline appealing to everybody. Also, many athletes fear that mental training will result in their desires and feelings being controlled and manipulated by outsiders. To alleviate apprehension, therefore, the mental training program needs to be voluntary, and the "mental coach" needs to establish rapport with the athletes. These two key measures will go a long way toward encouraging the athlete to work with a sports psychologist or a coach who provides guidance in visualization, hypnosis, and the like.

"Relaxation," unlike many mental training approaches, was not something that was predominantly practiced off-site. Instead, Coach Winter constantly drilled his athletes to relax during track workouts. He describes a typical workout for his sprinters:

After (loosening exercises) we again walked a lap and then went into our sprint form drills, and here is where we really stressed relaxation. Day after day we went in pairs through a series of sprint form drills. Here, the coach not only checked out ideal sprint form, but also that jaws flopped loosely, hands were like a rag doll's and wrinkles were nonexistent on foreheads. Shoulders had to be carried low and relaxed. Relaxed sprinting soon became a habit pattern which would hold up under any and all conditions, even the Olympic finals. When they sprinted, all our men looked alike. You could always identify a San Jose sprinter by this smooth, fluid, relaxed form.

. . . If relaxation can cut down on reaction time, we surely wanted it on starts and we *insisted* on it. Before getting on our marks, we went through a few relaxation exercises. We concentrated on staying loose at the "come-to-your-marks" position, "get-set" position and particularly on the "go" position. At the gun, we moved our arms very fast, but kept them loose.

. . . Before taking any starts, we always did these exercises.[5]

Winter recounts many cases of athletes who greatly benefitted from using his technique. For example, he tells the story of Lee Evans, who experienced an extreme amount of stress just a few hours before his 400 meter race in the '68 Olympics. Winter managed to get Evans to go "through the relaxation routine and he was asleep in three minutes. No longer were there wrinkles in his forehead. He had obtained peace of mind." [6] Evans subsequently went on to win the gold medal, setting a world record in the process.

Another San Jose State track star who used "relaxation" to advantage was Dan Ripley, the former world record holder in the pole vault (indoor). Ripley recalls the "mental set" he adopted when he established a world record mark of 18 feet 1 inch in 1979:

I didn't think I had a chance, so I relaxed and stayed loose. On my first try, I just ticked the bar. That gave me confidence and I relaxed even more. Thinking positive, I said, "I can make it" and I did—on my third attempt.[7]

Coach Winter's work with the San Jose State track team illustrates well the enormous contribution mental training can make to any athletic program. The Canadian Olympic Association also considers mental training valuable, so much so that it sponsored the translation of an East German sports psychology book, in the hopes that an understanding of its contents could help Canadian coaches and athletes. The book, *Psychology from Start to Finish* (English translation, 1986) by Frank Schubert, Ph.D., was originally published in 1981 in East Germany under the title of *Psychologie zwischen Start und Ziel*. Dr. Schubert's book is a highly generalized introduction to sports psychology, and contains no East German training "secrets." However, it does include a good section on "mental practice" (imagery).

Dr. Schubert says three conditions are necessary for successful utilization of imagery: 1) athletes practicing the technique "should be at least 12 years old;" 2) "they should feel no inner aversion to the exercise; they have to have their heart in it;" and 3) athletes must "have clear and pre-

cise ideas of the entire exercise and all details they wish to ‘train’ in their mind.”[8] Dr. Schubert does not explain why he implicitly discourages the use of imagery by athletes less than 12 years of age; but, his advocacy of an age threshold for the practice imagery means that he believes the discipline is definitely appropriate for junior athletes (12 to 14 years of age, as well as high school age athletes).

Dr. Schubert next proposes the ideal way for imagery to be carried out: 1) the athlete should “visualize the movement several (3 to 5) times as vividly as possible;” and 2) the imagery session “should not last longer than five minutes, and should be followed by a period of actual realization of the movements.” This second condition is important because, according to Dr. Schubert, “by going through the movements mentally and by repeating them several times practically, you improve nerve connections;” therefore the combination of imagery and physical practice “complements, reinforces, or corrects the motions.”[9]

Dr. Schubert then relates four instances of athletes using imagery to improve their performance, with the best story being the one about Boris Shaklin (USSR). Shaklin won four gold medals in the 1960 Olympics in gymnastics (individual, side horse, parallel bars, vault) and one gold medal in the 1964 Games (horizontal bar). Dr. Schubert does not indicate the year or competition in which the following incident took place. Still, from reading the story one tends to believe that Shaklin went about his routines the same way at every competition:

“Shaklin” was the announcement from the loudspeaker. He walked to the platform, and stood in a corner, right at the edge. He turned sideways and remained in that position. A second, then two, five, almost half a minute went by. What was going on inside him? Shaklin stood there motionless with his eyes half closed. His cheekbones were even more pronounced when he pressed his lips tightly together. His arms were hanging limply. Only his long supple fingers were moving somewhat, feeling the cool metal as they went along . . .

All of a sudden he spun around and took the first step toward the apparatus. Then came his mount, with his hands grasping the bars. He began the first part of the difficult exercise. I watched the expression on his face carefully—completely relaxed. I could not see any signs of exertion or anxiety. Then came the dismount. Silence everywhere. The sighs of relief that had been held back by the thousands of people in the gymnastic hall were suddenly released. But Shaklin just stood there calmly. When and where had I experienced something similar? Not in any gymnastic competition . . .

The former world champion. . . revealed later the ritual he would go through before starting his exercises: “I did not pray or anything. I would think of an exercise that I had done particularly well in the past, and my muscles would feel the rhythm. That’s all.”[10]

Observe that what Shaklin did is precisely what G. D. Gorbunov advocated in his 1979 paper (see Soviet Athlete chapter). Gorbunov contended that “it is best to actualize goals only in the last few minutes and, in some cases, seconds before the start.” I have quoted Gorbunov several times on this to reemphasize the benefits last-minute mental rehearsal can provide; these benefits will accrue especially to those athletes who have already regularly practiced mental training, and therefore can perform a last-minute visualization or self-hypnosis session without any difficulty. We do not know for a certainty if Shaklin regularly practiced imagery, but one would surmise that he did, based on the unflappable way he was able to employ the technique during competition in front of a large crowd.

The balance of Dr. Schubert’s book contains few high points. The mental training regimen of the East German Olympic athletes is not mentioned or even hinted at. In fact, one wonders if Dr. Schubert is holding back a little on the amount of information he discloses. Whatever the case,

Psychology from Start to Finish, being an introductory sports psychology text, sheds no light on the “mental training gap” controversy.

Music for Workouts

In reviewing recent Soviet sports psychology research, it will immediately be seen that imaginative and well-constructed studies continue to emerge from the USSR. One 1984 study in particular merits our attention: “Monotony in Sport and Its Prevention Through Music,” by Y. G. Kodzhaspirov. In our Tennis chapter we saw how a classical music “stress tape” put out by Bill Sheen reduced tension (heart rate, body temperature, etc.) in many tennis players, including Virginia Wade and Billie Jean King. Kodzhaspirov went way beyond Sheen in studying music’s effects on athletes. The Soviet scientist introduced three varieties of music into the workouts of 649 wrestlers, boxers, and gymnasts; he then observed over a six-month to two-year period how the athletes responded to the music. The reason Kodzhaspirov conducted his study was because physical training workloads of athletes have now become so demanding that attitudinal problems are surfacing more than ever, with the monotony factor being the major culprit. The same drills, weightlifting repetitions, etc. are practiced by the athlete over and over again, day in and day out; in virtually every sport nowadays you see the presence of this type of “salt mine” routine. As Kodzhaspirov notes:

Even in acyclical and mixed sports events, which at first glance appear to be free from the cyclical form of work, all the training exercises are, as a rule, executed for certain periods of time. There are special exercises which require multiple repetitions in each session day after day, month after month, and year after year.

This does not take into consideration improvement of sports mastery in which only a small number of movements are used and which high level athletes must repeat tens and hundreds and even thousands of times in each session in order to perfect precise execution.[11]

Practicing the same drill thousands of times will assuredly help the rare athlete who can maintain his motivation in the face of such a boring plight. But, more often than not, the monotony of it all eventually gets to the person, severely curtailing his progress in the process. Kodzhaspirov sums up the situation:

As a result of the development of monotony in athletes, interest in the training work decreases. There is untimely or early fatigue, poor attention and watchfulness. . .

The quantity and quality of the work executed suffers. There is a slow-down in improvement of sports achievements, absences increase, and the athletes separate themselves from the others more often.[12]

To make the workout seem less monotonous to the athlete, Kodzhaspirov introduced an “irritant” into the training session—the “irritant” being music. The Soviet researcher points out that “new irritants such as sight and sound stimulate new areas of the brain cortex,” impeding “the development of inhibition beyond its critical bounds” (which, if this did not happen, would result in monotony).[13] In preliminary research before undertaking his major study, Kodzhaspirov discovered that music definitely has its place in workouts, but is *not* recommended for certain portions of the training session. He informs us:

It was established that musical stimulation in the training session is carried out best in only the parts needed, and not for the entire session. It is needed in those portions of the session in which there is repeated execution of simple or deeply learned exercises. Such exercises do not require active following of the movements and great concentration on execution of the work, i.e., in those portions where music will not distract or

interfere with the work.

Periods of the training session which require mainly active attention are not recommended for musical accompaniment. In these periods music interference can decrease the activeness of information perception and slow down preparation for fast reactions to the information received. These periods are usually the introductory portion of the main session, the time of learning new material and its reinforcement, explanations by the coach and elements of competition (throws, pulls, offensive and defensive moves, and so on).[14]

Kodzhaspirov found that three types of music can be used to advantage during workouts: Work-up Music, Leading Music, and Quieting Music. The following table describes when these three types of music should be used, as well as their nature.

TYPE	USE WHEN	NATURE
Work-up Music	During the warm-up. (First 20-25 minutes)	Happy, cheerful, rhythmical, in a major tone, executed in a gradually accelerating lively rhythm.
Leading Music	During the main portion of the workout, when drilling, doing repetitions. (Optimal duration—10 minutes)	Rhythmical quality. Pleasant sounding. Rhythm should be adapted to the planned work tempo.
Quieting Music	Just before and after the end of the workout. (Play for 5-7 minutes before the end till 5 minutes after the end)	Soft, melodious, encouraging relaxation.

(Note: Change the music played during the workout on a regular basis; for example, every 2-3 workouts.)

The three types of music, says the Soviet scientist, should reflect the taste of the athlete. It should be realized that if a team practice is involved, not everyone's preference can be satisfied. Kodzhaspirov does not mention how this problem can be gotten around, or if it really matters so much. He does say, however, that "repetition of the same musical production should not take place sooner than 1-2 months." Again, hearing the same music day in and day out can become just as monotonous as the repetitive part of the workout, and new areas of the cerebral cortex will not be stimulated this way. So, **change** the music—and don't play it again for at least another two months!

During their workouts the athletes in Kodzhaspirov's study listened to the three types of music, which were presented in the recommended sequence; the tunes were also changed regularly. Considerable improvement in both attitude and performance were detected in these athletes. Reports Kodzhaspirov:

Results showed that during the time of hearing the leading music the amount of work executed increased by a mean of 39.5% (in comparison with analogous data from

previous control times without music).

. . . According to the responses given by most of the athletes, musical accompaniment in the sports sessions gave them a clear and new impression. It counteracted monotonous thoughts and brought about unexpected splashes of enthusiasm, interest in the training, and created a feeling of satisfaction and a desire to work more than usual. They stated that the music helped them overcome the feeling of satiety and boredom from the usual training conditions and made the ensuing work happy and satisfying. [15]

Based on his studies, the Soviet scientist concluded that exposing athletes to the three types of music according to the method spelled out in the table ensures against monotony. Very importantly, Kodzhaspirov also states that it is practical to present the music along the lines suggested.

Tennis greats Ivan Lendl and John McEnroe lend additional credence to Kodzhaspirov's contentions. On the instructional videotape, "The Winning Edge" (1985), Lendl informs the viewer that "like a lot of other players, Mac and I both practice to music because it gives you rhythm and inspires you to play your best. I have speakers in the trees and on my practice court, and I seem to play my best matches when one of my favorite songs sticks in my mind." McEnroe goes one step further in endorsing the music-based workout concept, telling the viewer that for him "music is about the only thing that makes practice bearable." Both athletes in their own way follow Kodzhaspirov's advice, and the success Lendl and McEnroe have enjoyed may be partly attributable to their adoption of this mental training strategy.

Dr. Unestahl and Inner Mental Training

Extremely impressive and valuable work with Swedish athletes has been done by Lars-Eric Unestahl, a sports psychologist at Orebro University in Sweden. In 1981 Dr. Unestahl presented an exciting scientific paper, "New Paths of Sport Learning and Excellence," at the Fifth World Sport Psychology Conference in Ottawa, Canada; this paper, available in English, details his outstanding work. As of 1981, nearly 5,000 Swedish athletes had gone through a mental training program, called Inner Mental Training (IMT), created by Dr. Unestahl. IMT contains two main parts: 1) a 12-week general mental training program, applicable to all sports, and 2) mental preparation for a specific competition, best done within a week before the competition. The 12-week basic IMT program consists of the following:

- Week 1: Muscular relaxation I.
- Week 2: Muscular relaxation II.
- Week 3: Mental relaxation I.
- Week 4: Mental relaxation II.
- Week 5: Dissociation training.
- Week 6: Detachment training.
- Week 7: Goal-programming training.
- Week 8: Ideomotor training.
- Week 9: Systematic desensitization.
- Week 10: Problem-solving.
- Week 11: Self-confidence training.
- Week 12: Concentration training.

The second part—mental preparation for a specific competition—is to be performed only after the athlete has completed the 12 weeks of basic mental training, and it entails:

- 2 sessions for activation and psyching-up.
- 2 sessions with post-hypnotic suggestions concerning the ideal performing state.
- 1 session with mental rehearsal of the coming competition.

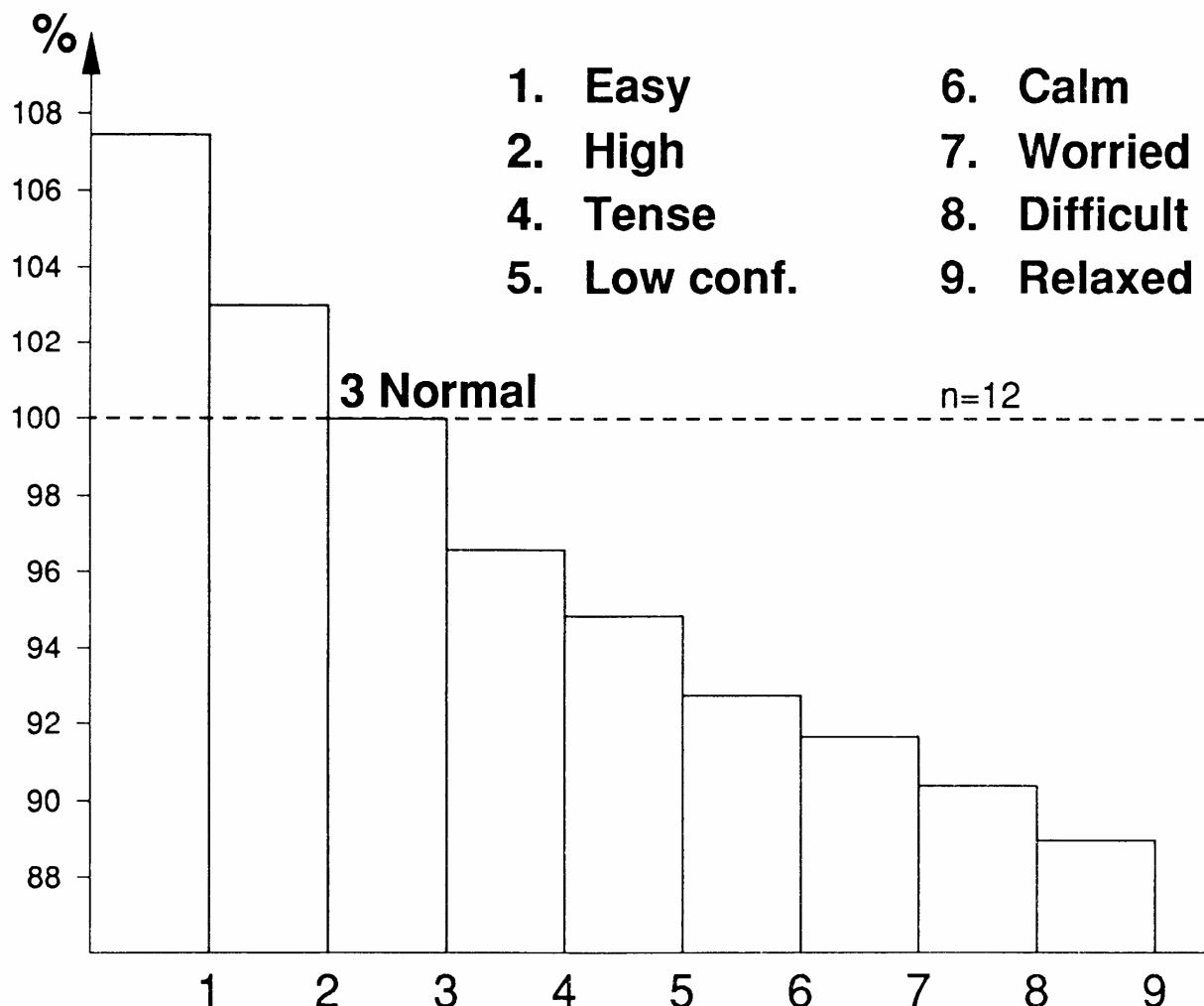
The entire Inner Mental Training program is put forth on three audio tapes (available in English) which the athlete listens to on his own, it being impossible for Dr. Unestahl to work on an individual basis with every single athlete interested in learning and applying IMT. Tape I, "Basic Mental Training," covers the first six weeks. Tape II, "Mental Training—Sport," instructs one on the concepts introduced in Weeks 7-12. Tape III, "Mental Preparation for Competition," presents the five mental rehearsal sessions listed above, which one should perform before a competition. [16]

As you can see, the basic Inner Mental Training program takes three months to complete. Dr. Unestahl favors this deliberate pace because: 1) it is "long enough training to give good learning and automatization, but short enough to prevent there being too many drop-outs," and 2) it allows for a "step by step build-up in order to keep motivation levels high." [17] Also, you observe that muscular and mental relaxation, as well as dissociation and detachment training, are names used to describe the lessons of the first six weeks. In 1981 when I talked to Dr. Unestahl (see Soviet Athlete chapter), he conceded that the term "self-hypnotic training" could just as easily be used to depict these six weeks' teachings. He admitted:

For sure some of the contents of the first six weeks you can call self-hypnotic training if you want. It doesn't matter. I don't use the term "hypnosis" much; the term doesn't matter. But, many people have wrong ideas about the term "hypnosis," so I call it "mental training."

Again, one of the recent developments in sports psychology is the trend to assign other names to hypnosis—in the hopes that the athlete will employ this powerful technique, without him necessarily knowing that hypnosis is what he is actually engaging in. So nowadays, one encounters "mental training consultants" and "sports psychologists" who teach "self-encouragement," "mental rehearsal," "imagery," and the like; you find few people working with athletes who outwardly call themselves "sports hypnotists" and say that they teach self-hypnosis. The reason for this, as Dr. Unestahl indicates, is that you don't want to scare away the customer (the athlete) by uttering that "threatening" word—*hypnosis*.

The Week 11 section on self-confidence training (on Tape II) is perhaps the most important part of the general mental training program. Throughout this book we have seen athletes who have been given confidence-building hypnotic suggestions perform very well during the ensuing competition. Dr. Unestahl reconfirmed the wisdom of giving such suggestions. He conducted a study on the effects of various posthypnotic induced states on strength performance. Only two states—with one of them being a **high confidence** state or feeling—brought about increased strength performance. A brief summary of Dr. Unestahl's experiment is presented on the next page. The Swedish researcher clarifies this summary for us by noting that "the maximum strength on left and right elbow flexion, and left and right knee extension was measured during 18 conditions." Two of the eight posthypnotic states—high confidence, and perceived task difficulty = Easy—resulted in increased strength performance, while the other six "decreased strength compared with normal waking." [18] This is a good thing to know, especially if your sport requires a lot of strength movements. For instance, a weight lifter can likely benefit from giving himself a hypnotic suggestion such as: "I will lift the bar with *no* problem." A lineman in football could tell himself, "I will go through my man *every* time," while a wrestler could give himself the suggestion, "I will pin my



opponent quickly and with *ease*.” However you phrase the suggestions, make sure that they: 1) are **confidence-builders**, and 2) portray the task as **easy**.

In the Self-confidence training section on Tape II Dr. Unestahl first has you select a “trigger” of your choice. This “trigger,” or hypnotic cue, can be such things as stepping into the batter’s box, stepping onto the starting block—things *you* do; or, it can be an action another person does, such as the referee blowing his whistle. After you have selected your trigger, Dr. Unestahl presents these confidence-building suggestions:

From now on, when you run into or use your trigger, it will immediately release an *intense* and complete concentration on the task.

You will be *completely* involved in what you are going to do, and experience that *nothing* can disturb you at that time.

Your body will function maximally, and you experience yourself in the **winning feeling**.

Each time you use this training program, the relation between your trigger and total concentration will become stronger and more reliable.

Each time you use your trigger, it will work *more* effectively. When you know that your trigger works, you will experience *increased* assurance and strength. You will experience that you can produce and maintain concentration, and that helps you to perform even better.

Another vital element in any mental training program is goal-setting. "Select bold goals," advises Dr. Unestahl. Too often athletes content themselves with creating easily attainable goals. Dr. Unestahl notes his 1981 "investigation of top-flight Swedish soccer showed that over 70% of the players had the goal of 'a place on the team,' i.e., a goal that they had already reached."^[19] **Bold goals**, says the Swedish scientist, **create motivation**. Obviously, winning the league championship is not made any easier if one's primary goal is simply to make the team. Athletes out for team sports might as well make winning the league championship their main goal, because overambitiousness rarely prevents one from making a team, while limited aspirations held by one or more players can hurt a team's performance over the long run. Once you are officially on a team, redouble your efforts to make the season truly meaningful and satisfying. If you have not previously done so, establish as your main goal to win the championship; forget about making the team—you're already on it!

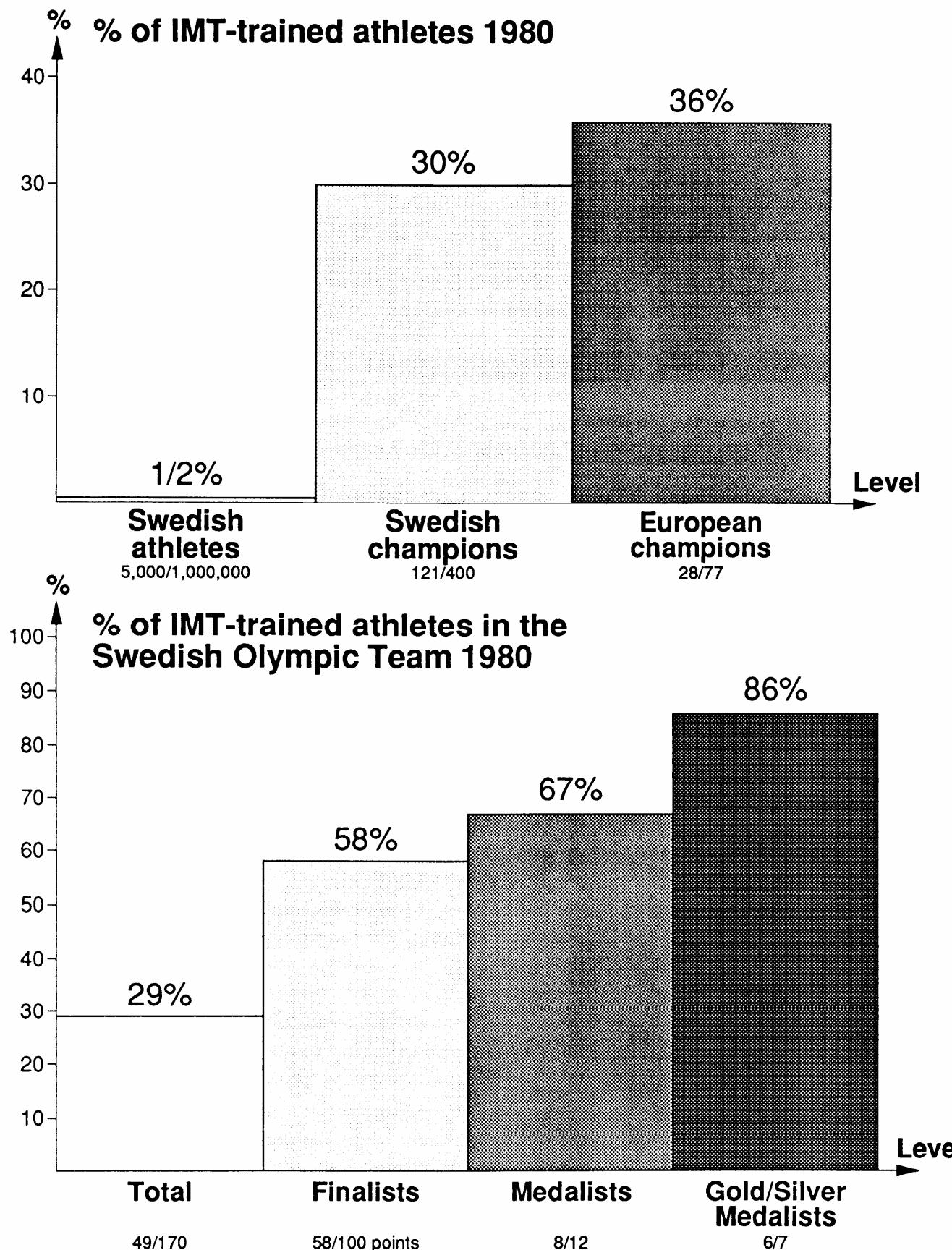
To make goal-setting more effective, Dr. Unestahl suggests that you create "a written contract, stating positive and concrete future goals in present terms. Sometimes," he continues, "a fabricated photo of the athlete as prizewinner can serve the same purpose." The contract and photo, in any case, are "to be placed in an intimate environment such as the bedroom" so you will be constantly reminded of your goal.^[20]

Tape III, "Mental Preparation for Competition," is used: 1) after the athlete has completed the 12-week general program (Tapes I & II), and 2) in the week leading up to the competition. This second condition can cover a longer time period than one week for athletes participating in individual sports. But, Dr. Unestahl indicates that team players should utilize Tape III just two or three days before the competition. He states, "The mental preparation of a team player starts much closer to the match, preferably two days before the (coach's) tactic discussion."^[21] In team sports, such as basketball, many games are played over a season; injuries and line-up changes often necessitate last-minute shifts in tactics and strategy. These are possible reasons why Dr. Unestahl advises team players to not look too far ahead in their mental preparation.

To give you an idea of how Tape III attempts to get you ready for competition, we shall look at the part on it which presents the Mental Rehearsal session. This session, as expressed by Dr. Unestahl, "starts with a regressive activation of the Ideal Performing State-feeling from a former model-competition. The feeling is then transferred to the future competition."^[22] In other words, you *recreate through visualization* the way you felt on a day in the past when you performed flawlessly; then, you embed that feeling for the upcoming competition.^[23] Before the Mental Rehearsal session formally begins, you are led into a state of relaxation. Then comes the visualization portion, a brief account of which follows:

Drift back in time until you return to a competition where you did very well—a competition where you had the *winning feeling*—a competition where everything worked. . . Relive the competition. Experience it *vividly* and intensely, and in detail. Experience the winning feeling again. *Feel* it and imprint it. When I contact you again after three minutes, you have had time to relive the entire competition. You can now get into the competition, and relive it *intensely* and realistically.

(3 minutes of pleasant music)



Now you can leave the competition, but keep this winning feeling. When you now move forward in time, you take this feeling with you.

Dr. Unestahl includes in his "New Paths of Sport Learning and Excellence" paper the outcomes of many different studies on mental training he has conducted. The most interesting result, presented on the preceding page, shows how IMT-trained athletes have fared in competition. The charts show that 49 out of 170 members (29%) of Sweden's 1980 Olympic team underwent Inner Mental Training. However, 58% of the 1980 Swedish Olympians who made it to the finals of their particular sport were IMT users. The percentage keeps rising as the performances improve. For example, 12 Swedish Olympic team members won medals in 1980; 8 of the 12, or 67%, practiced Inner Mental Training. Next, 7 Swedish Olympians in 1980 won gold or silver medals; 6 of these athletes, or 86%, followed Dr. Unestahl's IMT program. The other chart shows an impressive number of European and Swedish champions using Inner Mental Training to help them win.

In talking to Dr. Unestahl, he told me that one reason why such a high percentage of Swedish national and Olympic champions happen to be IMT practitioners is because they are motivated, perhaps by necessity, to investigate ways to improve their performance, to squeeze out of themselves the extra 1% or 2% improvement required to capture the title. Explained Dr. Unestahl, "If you are good already, you are looking for things that can make you better. You are more eager to start mental training, to try things that will help you further." A self-selective process in effect occurs. Athletes not in the elite category have less cause to incorporate mental training into their regimen, and therefore do not gravitate as easily toward IMT. By default, the elite athletes seemingly end up being overrepresented in the totals of athletes winning gold medals, European championships, etc. I said "seemingly" because there is another reason—a reason many sports psychologists would not hesitate to trumpet—which can explain this overrepresentation phenomenon. I refer, of course, to the fact that Inner Mental Training might work superbly, providing athletes adopting the approach a competitive advantage over opponents who still rely on superficial and primitive psych-up methods. Naturally, it appears immodest to promote this explanation, and by and large Dr. Unestahl lets the results speak for themselves.

I am a firm believer in you, the athlete, assuming full responsibility for your own mental preparation; and, Dr. Unestahl apparently shares my philosophy. The Swedish scientist states that "it is important to feel that what you (the athlete) are doing, what you are achieving is dependent on what you are doing, not dependent on another person." He goes on to say that although 5,000 Swedish athletes through 1981 had completed the Inner Mental Training program, he himself only "personally worked with 500, because the training is mainly self-instruction." As for those athletes he personally works with, Dr. Unestahl insists that they take an active role in the self-improvement process. He explains:

I don't want to see the athlete, even the first time, until he has finished three weeks of mental training. Because it shows that the athlete has taken responsibility for his situation; it shows that he has motivation to do something about it, and is willing to do something himself.

This may seem a harsh policy, but really it is as it should be. An athlete who will not expend any effort to help himself does not deserve the assistance of others. Remember, also, Coach Winter saying that "they (the San Jose State track team members) have to want to get into the (relaxation) course;" certainly there was no coddling in his program.

Dr. Unestahl's thoughts on mental training can be summed up in one comment he made to me: "If an athlete depends on a coach shouting from the side of the field, then something is wrong." Regrettably, this is the typical situation encountered today in sports, despite the inroads mental training has made in recent years. Most coaches still think making appeals to the athlete's conscious state, while ignoring the player's subconscious altogether, is what coaching is all about.

They continue to rant and rave from the sidelines, bringing disrespect upon themselves, the schools and teams they represent, and humanity in general. These coaches and most athletes as well are ignorant of the benefits mental training affords, and so they persist with their futile pep formulas. To correct the “something is wrong” situation Dr. Unestahl describes, therefore, ignorance of mental training and its payoffs needs to be replaced with widespread awareness of how athletes can prosper from regularly practicing self-hypnosis, visualization, and related disciplines.

Unfortunately, even the “experts” who are supposed to liberate athletes and coaches from the old ways often fall down on the job, pushing back the day when mental training becomes a standard element in sports programs. As Dr. Unestahl observes, “The steadily increasing interest in mental training has led many sport organizations to consult psychologists or psychiatrists with or without a background in sport. But in many cases the results have been discouraging, and this has given rise to a distrust of mental training.”[24] The Swedish scientist says that athletes and coaches interested in employing mental training can insure against disappointment by seeing to it that two conditions are carefully observed, and two expectations are always kept in mind:

Conditions

- 1) The mental trainer should have a very good knowledge about sport in general and the specific sport in question. In fact it seems better to have a good coach who learns about mental training than a psychologist who tries to learn about sport.
- 2) Stress must be laid on the motivation needed for mental training. It might even be a good idea to exaggerate the difficulties of mental training, in order to prevent drop-outs.

Expectations

- 1) During the first weeks very few positive results can be expected. There are actually even chances of negative effects, due to changed routines and too much awareness of the mental procedure.
- 2) The greatest effects of mental training cannot be expected until after so long a period that the athlete has not only learnt the training, but has automatized it—it has become a way of thinking, a way of goal-programming, a way of behaving, which comes quite naturally and automatically.[25]

Condition 1 is interesting because it calls for the coach to become a mental training expert, which brings to mind Professor Alexi Medvedev’s remark that “our (Soviet) coaches must be psychologists” (see Weightlifting chapter). It remains to be seen whether coaches heed the advice of Prof. Medvedev and Dr. Unestahl. Meanwhile, you, the athlete, should not wait for your coach to become proficient in mental training, or for him to bring in a sports psychologist to work with you and your teammates. Instead, learn and regularly practice one of the mental rehearsal techniques on your own. That way you will become self-sufficient as far as your mental preparation is concerned, and more immune from any follies or well-intentioned but counterproductive psych-up ploys of your coach.

Mental Training Books

When I interviewed weightlifting champion Russ Knipp in 1977, he stressed that “there needs to be a course or book or something” to teach weight lifters and other athletes confidence. Knipp’s wish has been fulfilled, and the task now is to inform athletes and coaches about all the sports-related mental training materials—books, audio and videotapes—currently available for reference. Without passing this task onto others, I shall describe here a few of the more prominent mental

training books which have appeared in recent years.

In Pursuit of Excellence (1980), by Dr. Terry Orlick of the University of Ottawa, was one of the first such books geared to athletes to hit the scene. Dr. Orlick presents many mental rehearsal techniques for athletes to try out; these techniques include imagery, self-hypnosis, etc. Unfortunately, Dr. Orlick rarely identifies any athletes who have benefitted from mental training. For instance, he states, "I once worked a cross-country skier. . ." but never reveals exactly who this was. Elsewhere he talks about a "top Swedish sportsman" and a "young figure skater," again keeping their identities a secret. Dr. Orlick's few examples therefore are weak, thanks to their being so vague. Because the author's examples lack punch, the reader of *In Pursuit of Excellence* might not wind up inspired enough to try out the mental rehearsal techniques contained in the book; this is too bad because the mental disciplines themselves are substantive.

Six years later Dr. Orlick tried again, authoring two complementary works—*Psyching for Sport* (1986) and *Coaches Training Manual to Psyching for Sport* (1986.) These books discuss the advantages of and mechanisms for establishing and following a detailed mental training program. Sample forms are provided in each which, if utilized, can help the athlete devise an individualized mental training program, and aid him and the coach to evaluate on an on-going basis the effectiveness of such a program. *Psyching for Sport*, in contrast to *In Pursuit of Excellence* with its foggy examples, specifically identifies and records the experiences of a number of Canadian athletes who profited from the incorporation of mental training strategies into their training regimen and the pre-competition period. These athletes include canoeists Larry Cain, Alwyn Morris, Sue Holloway, and others on the Canadian National Canoe Team, who worked with Dr. Orlick for three years prior to the 1984 Olympics; this long-term linkup paid dividends as the Canadian canoeists ended up winning 6 medals at the Games—2 gold, 2 silver, and 2 bronze. The mental training experiences of other athletes, such as Sylvie Bernier, the gold medalist in springboard diving at the '84 Olympics, are also detailed, and often include direct quotes from the athlete whose case is being discussed; such quotes render the stories completely believable to the reader, and provide an impact that no amount of theorizing can ever deliver. All in all, Dr. Orlick's two *Psyching for Sport* books constitute a major improvement over his earlier work, and definitely can be studied to advantage by athletes and coaches.

Similar books promoting mental training have come out besides Dr. Orlick's, most notably: *The Miracle of Sports Psychology* (1982), *Sporting Body Sporting Mind* (1984), *Peak Performance: Mental Training Techniques of the World's Greatest Athletes* (1984), and *Mental Training for Peak Performance* (1984). These works have been discussed at length elsewhere in this book. In general, they contain a few anecdotes, usually poorly documented, of athletes benefitting from mental training, and then the balance of these books is primarily devoted to hyping the authors' pet mental rehearsal exercises. Of the four books just listed, Dr. Eugene Gauron's *Mental Training for Peak Performance* offers the best documentation of athletes' experiences with mental disciplines. Dr. Gauron does an excellent job at times of answering the 5 W's: who, what, when, where, why—especially in his Preface, where pro-mental training testimonials of elite level athletes are presented. He also delivers some of the most lucid commentary one will ever encounter on mental training's place in sports programs. One example of this is where Dr. Gauron points out the tunnel vision possessed by a multitude of coaches and athletes, and what they need to do to broaden their focus:

Mental training for athletes is an idea whose time has come. For many years, coaches and athletes devoted themselves to improving physical training programs and refining ways to develop and improve the human body. The focus on this aspect of the human being seems to have gone about as far as it can. And yet coaches and athletes still search for the "extra edge". . . If you have devoted years of effort and labor to practicing and developing the body and neglected or ignored mind development, there

is much yet left untouched. Sooner or later, in order to be all you can be, you will have to have the mind for it too.[26]

In 1985 Dr. Robert Nideffer, author of *The Inner Athlete*, came out with another book—*Athletes' Guide to Mental Training*. This book is essentially a reorganized and updated version of the former. As is the case in other mental training books, we find in Dr. Nideffer's work a few brief stories of athletes benefitting from mental rehearsal techniques. Dr. Nideffer, for instance, says that Greg Louganis, the 1984 and 1988 Olympic double gold medalist in diving, "uses imagery extensively in practicing his dives." Continues the sports psychologist:

He is thinking about them (his dives) away from the pool, between dives during competition, and when he is actually on the board or platform. He goes over them very systematically again and again, rehearsing from several different perspectives. He can visualize himself doing the dive, or take the perspective of someone in the audience watching the dive. He can image from inside his own body, generating the kinesthetic feelings as well as the visual images. Finally, he rehearses to music, using the tempo and rhythm of the music to assist him in his timing and execution.[27]

This is certainly interesting information, partly because Louganis, the first person to win both diving events in an Olympics (3-meter springboard and 10-meter platform), is widely recognized as the greatest diver in sports history. What would make the story completely convincing, though, would be a quote from the athlete himself. Dr. Nideffer does not provide us with such a quote, so we either have to take the sports psychologist's word on faith or entertain some doubt about the story's accuracy. The main goal of anyone who writes a mental training book should be to convince and inspire the reader to try out mental training strategies. Dr. Nideffer could have really presented a blockbuster mental training story had he quoted Greg Louganis; and, if such a story could not motivate the reader to try out imagery or other mental rehearsal techniques, then probably no other story could, either. But, Dr. Nideffer, as I said, did not go to the trouble of presenting a testimonial from Louganis; nor does he indicate how the diving champion learned imagery (from a book, coach?).

Dr. Nideffer does much the same thing in relating how he worked with javelin thrower Tom Petranoff. Petranoff, recalls the sports psychologist, "began practicing the psychological skills which I describe in this book"—such mental skills as Centering and Attentional Redirection. After working for two weeks to improve his mental concentration and tension control, under the guidance of Dr. Nideffer, Petranoff increased his javelin mark from 300' to 327'2". This latter distance, thrown at the 1983 Pepsi track meet in Los Angeles, set a world record in the javelin by 10 feet! Again, we have here an outstanding mental training story, with the exception that the athlete's own words are excluded.

There is little question in my mind that Dr. Nideffer's stories about Louganis and Petranoff are correct. The sports psychologist's book contains pictures of both athletes in action, which further indicates that he worked with and/or talked to the two. However, after reading these types of reports in mental training books, where only the sports psychologist's side of the story is presented, one begins to wonder about the motives of the author, whether some sort of "hidden agenda" exists. The thought often crosses one's mind that perhaps the author wrote the book primarily to drum up business for himself.[28] To discourage these thoughts from ever entering readers' minds, sports psychologists and others writing books and articles on mental training need to include: 1) the athlete's point of view, as expressed in direct quotes, on the effects of mental training; and 2) detailed information on the circumstances surrounding the athlete's use of mental training (who, what, when, where, why). Until this is done, one is justified in entertaining the suspicion that mental training advocates twist, exaggerate, and suppress facts to suit their purposes; should such a suspicion be aroused, the likelihood that mental training will be given a fair trial

diminishes (an understandable, though most unfortunate, outcome).

In 1977 Russ Knipp, we recall, rated as top priority the creation of “a course or book or something” to teach mental training to athletes. Dr. Nideffer eventually came to this realization as well. In his *Preface to the Athletes’ Guide to Mental Training*, he notes that “when working with the (U.S.) men’s track and field team, I often found that the coaches and athletes were almost entirely different from one meet to the next.” Dr. Nideffer also found that “the number of athletes to be served, the geographical distances to be covered, and the limited resources (e.g., availability of other sport psychologists to provide follow-up services)” severely handicapped his work as a sports psychologist, creating, in short, “a major logistical problem” for him. The whole situation was quite untenable, and he concluded that “some type of training program and resource material were needed. Somehow, both coaches and athletes had to learn how to be their own ‘sport psychologists’—a position shared by Dr. Unestahl and Alexi Medvedev, among others.[29] Therefore, to help make athletes and coaches more self-sufficient in carrying out a mental training program, Dr. Nideffer wrote his book.[30] Although the mental rehearsal techniques presented in *Athletes’ Guide to Mental Training* are much the same as those found in similar books, they are highly readable; Dr. Nideffer has done a good job of making his advice on mental training easy to understand.

Scientific Sources of Information on Mental Training

The best source of current scientific/academic research being conducted in sports psychology is the *Journal of Sport Psychology*, which is published quarterly by Human Kinetics Publishers. Each issue of this journal contains a multi-page section called the Sport Psychologist’s Digest. Comprising the Sport Psychologist’s Digest are brief descriptions of studies pertaining to sports psychology which have appeared in other periodicals; many of these studies relate the impact of mental training strategies on athletic performance. The balance of the *Journal of Sport Psychology* is devoted to: 1) scientific papers reporting on experiments involving psychologically-oriented sports questions, and 2) commentary on issues of significance in sports psychology; by far, one encounters more of the former than the latter, although occasionally some controversy arises which warrants a discussion.

The first issue of the *Journal of Sport Psychology* appeared in 1979, and this periodical has enjoyed steady growth ever since. Basically, the information published in this journal confirms what has already been known for a long time about mental training—that it usually, and often substantially, helps athletes; therefore the main things the *Journal of Sport Psychology* provides concerning mental rehearsal techniques are the scientific underpinnings and explanations for why mental training works. So, if you are the type of person who will consider using visualization, self-hypnosis, and allied mental disciplines for yourself or the team you coach *only* if these techniques are *scientifically proven*, consult the *Journal of Sport Psychology*.[31]

As we have noted throughout this book, the *Soviet Sports Review* often publishes scientific studies on mental training. You may wish to investigate this fine publication as well.[32]

Human Kinetics Publishers, which puts out the *Journal of Sport Psychology*, also specializes in the publication of sports psychology books. Human Kinetics regularly issues a catalog, which describes not only the books they market on mental training and sports psychology, but also the books, videotapes, slides, and films offered in several other sports categories—biomechanics, selected sports (synchronized swimming, hockey, etc.), coaching, and so on.

Besides offering sports-oriented materials, Human Kinetics has established the American Coaching Effectiveness Program (ACEP). This program is designed to help coaches work with and develop athletes. Seminars are frequently offered, with program participants following a

specialized curriculum. Two levels of curriculum currently exist—called Level 1 and Level 2. In Level 1 the topics covered are: Coaching Philosophy; Sport Psychology; Sport Pedagogy (teaching principles); Sport Philosophy; Sports Medicine. For coaches unable to attend ACEP seminars, Level 1 is available as a self-study course, a main point of which, explains Human Kinetics, is to help coaches develop “an *Athletes First, Winning Second* coaching philosophy.” With the Level 1 course comes several videotapes, one being “Sport Psychology for Youth Coaches.” Six self-study courses comprise the Level 2 curriculum: Sport Law; Time Management; Sport Physiology; Sport Injury; Sport Psychology; and, Teaching Sport Skills.

The Sport Psychology section in Level 2 appears promising because it tells the coach, relates Human Kinetics in their catalog, how to “teach athletes essential psychological skills for successful participation in sport. The skills presented are stress management, attention control, goal setting, interpersonal relations, and imagery.” Other topics include: 1) Motivation; 2) Performance and Arousal; and 3) Communication Skills. A textbook, which can be purchased separately, comes with this course: *Coaches Guide to Sport Psychology*, by Rainer Martens, Ph.D. Upon completion of each curriculum level—Level 1 or Level 2—the participant receives a certificate (a good thing to possess if one is a coach seeking career advancement) and is eligible for Continuing Education credit.

Dr. Nideffer, we recall, said that “coaches. . . had to learn how to be their own ‘sport psychologists,’” and for this to occur, he continued, there needed to be appropriate resource material and training programs. The American Coaching Effectiveness Program addresses well this need; and many other people, including Dr. Nideffer, with their books and tapes on mental training, have ably filled the void, too.

Given everything we have witnessed so far, it can be said that plenty of “software” (sports psychology programs, mental training books and tapes, etc.) now exists for the “hardware” (athletes and coaches) to run. It is now just a matter of getting the “software” into the hands of the users, and inspiring the users to try out the various mental training strategies.

One of the most consequential works Human Kinetics has published is *Psychological Foundations of Sport* (1984), a massive overview of the scientific/academic research and progress made in sports psychology. One chapter in *Psychological Foundations of Sport* we should especially note: “Mental Preparation Studies,” by Robert S. Weinberg of North Texas State University. What Dr. Weinberg does is review many of the most important scientific studies supporting a certain insight about mental training. For instance, he discusses what sports psychology has determined about confidence:

Researchers have provided experimental, correlational, and anecdotal evidence that patterns of thought can influence athletic performance (e.g., Corbin, 1972; Richardson, 1967a, 1967b; Shelton & Mahoney, 1978; Silva, 1982b; Suinn, 1976; Weinberg, Gould, & Jackson, 1979, 1980). For example, Mahoney and Avener (1977) found that gymnasts who reported experiencing occasional doubt about their own ability just prior to performance (e.g., “I hope I don’t mess up”) tended to perform more poorly than gymnasts exhibiting higher levels of confidence (e.g., “I can do it”). The idea that thoughts can influence behavior is also supported in the psychological literature.[33]

Obviously, the cautious athlete or coach who insists on seeing what the scientific literature says about confidence, before incorporating anything having to do with that state of mind into his training regimen, can look up and read the studies of Richardson, Shelton & Mahoney, Corbin, etc. So, for those people demanding scientific “proof” that mental training really works, Dr. Weinberg points the way.

The North Texas State University professor relates studies about the influence expectation levels have on an athlete’s performance, one interesting passage on this topic being:

It appears that if an individual *expects* to win, it is likely that he or she will perform at a higher level. The reverse also seems to be true for people who expect to lose! Ness and Patton (1979), for example, examined whether weight lifting was influenced by how much an individual thought he was lifting. Subjects were either unaware of the amount of weight they were asked to lift, believed the weight to be less than the actual value, or believed the weight to be of greater than its actual value. The results indicated that the subjects bench pressed more weight when they believed it to be less than its actual value. In essence, a subject's belief concerning his ability to lift a certain weight was an important determinant of his actual performance.[34]

What Ness and Patton's study suggests is that you have to do more than just set as your goal "to win." You also have to *inculcate the expectation* that you will win. Most importantly, coaches need to convey this expectation to their players. Underscoring the importance of conveying positive expectations, Dr. Weinberg tells about a study by Nelson and Furst (1972), where "subjects were paired so that one was clearly stronger than the other, but both believed the stronger subject to be weaker. The results revealed that the objectively weaker subject won arm wrestling competition 83% of the time."[35] Again, it is the old "mind over matter" principle at work; so, raise your expectations and your performance should rise, too.

Raising one's level of arousal (heart rate, body temperature, etc.) before competition is another subject Dr. Weinberg reports on. He observes that a higher arousal level "would be expected to benefit performance on tasks predominantly requiring strength and endurance. This notion received empirical support in a series of investigations by Weinberg, Gould, and Jackson (1980) and Gould, Weinberg, and Jackson (1980)."[36] The subjects in the above experiments consistently demonstrated superior performance on leg-strength tasks whenever they raised their arousal level beforehand. This finding led Dr. Weinberg to conclude:

It appears that for strength tasks, preparatory arousal is indeed effective in enhancing performance and might be appropriate for athletes such as weight lifters. When using this technique for a football team, however, it should be noted that not all football positions (e.g., quarterback, receivers) employ predominantly strength moves. Thus, the use of preparatory arousal might not be advisable for athletes in the "skill" positions.[37]

The "red flag" Dr. Weinberg waves about preparatory arousal possibly proving counter-productive for quarterbacks and receivers echoes the disclaimers I have made throughout this book—notably, that mental rehearsal techniques do not guarantee victory, and their administration must not be done cavalierly, for to do so breeds discontent and declining performance.

Professor Weinberg also reviewed the scientific literature on imagery, and found another instance where some deliberation is called for. He remarks that "although over 50 studies have investigated the effectiveness of imagery on physical performance, there is a lack of consistent results."[38] The consensus among sports psychologists, however, appears to be that imagery is effective when it is practiced correctly. Imagery, though, may work best for elite athletes, who generally possess a clear idea of the proper physical movements to picture in their minds (external imagery, when the picture taken is from an "outside" camera) or feel (internal imagery). States Dr. Weinberg: "There is some evidence (Corbin, 1967; Noel, 1980) that highly skilled athletes may benefit more from imagery than athletes of less skill, although more research is needed before firm conclusions can be drawn."[39] He goes on to say that imagery, when combined with various relaxation techniques, "may offer great potential for enhancing athletic performance," and cites studies by Dr. Suinn (1972 and 1976), Meichenbaum (1977), and Smith (1980). Taking into account all the research that has been conducted on imagery, Dr. Weinberg offers several tips on how the athlete should go about employing the technique. Some of his advice, which I paraphrase in part, follows:

1. Choose a quiet place where there are no distractions so you can concentrate. . .
Use one of the relaxation methods before initiating imagery.
2. Try to use all sense modalities when imagining. If you imagine hitting a tennis serve, try to *see* yourself, *feel* the movement, and *hear* the ball hitting the racket.
3. Try to image as vividly as possible and practice getting a clear image.
4. Make sure imagery is included systematically into your workout regimen.[40]

You may refer to Dr. Weinberg's chapter as well as the rest of *Psychological Foundations of Sport* for further details on scientific studies of mental training. Also, another source of studies on mental training you may wish to check out is the Association for the Advancement of Applied Sport Psychology. The AAASP promotes through its numerous activities psychological "intervention strategies" in athletics.[41]

The U.S. Olympic Team and Mental Training

During the 1980s substantial progress occurred in making U.S. Olympic athletes aware of what mental training has to offer, and providing these athletes the services of sports psychologists. To appreciate this development, we shall first note pre-existing conditions.

Dr. Suinn, in his July, 1976 *Psychology Today* article ("Body Thinking: Psychology for Olympic Champs"), made a lofty claim, stating that "my presence at the 1976 Winter Olympics marked the first time that the U.S. provided on-site psychological services for our athletes." With all due respect to Dr. Suinn, Bud Winter provided similar on-site services for U.S. track and field athletes at six summer Olympic Games. We recall, for instance, how at the 1968 Summer Olympics Coach Winter employed his "relaxation" technique on Lee Evans (who was super tense) a few hours before Evans' race. Winter, being an Olympic track and field coach, performed double duty—also acting as a psychologist, whereas Dr. Suinn was merely a sports psychologist, brought in specifically to serve in that capacity; perhaps this specific duty aspect is what Dr. Suinn meant by his remark.

Despite the work of Coach Winter and Dr. Suinn, their efforts constituted a mere drop in the bucket. Most U.S. Olympic athletes during the 1970s experienced little or no exposure to mental training strategies, and this fact led some elite athletes to call for reforms. Russ Knipp, for example, urged that a hypnotist work with the U.S. Olympic team members, and came up with this plan: "Training camp would last three or four weeks before the Olympics. Take that time, and prepare the athletes mentally for competition." According to Knipp, something like his mental training camp plan had to be enacted because at the Games too many U.S. Olympians "just lose it because of mentally lacking confidence in their ability. They start to doubt when they go out and see a world record holder, an Olympian they've admired for five years. They see the guy and say, 'Gee, I shouldn't be here.'"

Decathlon champion Bill Toomey agreed with Knipp on this matter, stating, "Too many great athletes have not been able to concentrate and create their own conditions. If the conditions are not right, they can't perform. As long as their conditions are OK, they're great. But, they fall apart when their environment starts to be challenged a little bit." Toomey, like Knipp, contended that "it would be a great asset to have a team hypnotist" work with U.S. Olympians. No doubt he would approve of a similar arrangement—where the coach acts as hypnotist—for athletes having problems developing good concentration. And this problem of athletes not developing adequate concentration is a large one, Toomey maintained. He noted, "Concentration is something coaches really don't teach young athletes. They sort of talk around it, and do a lot of conning." (Toomey's remark raises the question that if the coach will not or cannot teach you concentration, who will? As I have indicated many times, final responsibility rests with you. When it comes to proper

mental preparation, you must act as your own psychologist. You cannot afford to wait for a team psychologist to be appointed, or wait for your coach to get to the point to where he can instruct you in the use of effective mental rehearsal techniques; because these events will probably never happen.)

Janis Donins makes the good point that Knipp and Toomey's suggestion for hypnosis to be presented to U.S. Olympians has already been tried. He recalls that in 1979 at the U.S. Olympic Training Camp "in Colorado Springs they had some lectures on hypnosis. But, they were group lectures. I think they should be done **individually**. When it is a group lecture, you are distracted. Each individual has his own problems. One individual is phlegmatic, another sanguinic—many psychological types. There are different problems, too." Donins recommended therefore that the hypnosis lecture or instruction be tailored to each individual athlete. There are three main ways this can be accomplished: 1) the athlete makes an appointment with the hypnotist, and discusses his needs and weaknesses with him; 2) the coach takes the athlete to the hypnotist, and informs the hypnotist what areas the athlete needs help in (as happened with the Service High School water polo team; see Swimming chapter); and 3) the coach becomes proficient in the use of hypnosis, and employs the technique on the athlete (permission having been granted, hopefully). The severe shortcoming of each of these approaches is that the athlete is dependent upon another person—the hypnotist or coach—for his mental preparation. Anything can happen—and too often it does—when you rely on another person for your mental preparation: the person takes off on vacation, quits his coaching job, acquires a major disliking for you, and so on. To insulate yourself from such predicaments, become self-sufficient in your own mental training (learn and apply mental rehearsal techniques on your own).

Ed Arcaro, member of the 1977 U.S. national track and field team in the hammer throw, told me in a May 4, 1980 interview that he heard the same hypnosis lectures given to athletes attending the U.S. Olympic Training Camp. Like Donins, he felt the lectures were ineffective, primarily because most of the athletes in his opinion were not receptive to the lecturer's message. Recounts Arcaro, "There have been people in the past who have tried to inform throwers of mental techniques a little out of the ordinary, and it has never gone over. They take a lot of verbal abuse for their ideas, and suffer a substantial decrease in esteem in the athletic community. It's just hard to get a new idea across."

Arcaro himself knows first-hand how hard it is to get a new idea across. He developed and applied a form of meditation to help himself relax and concentrate during competition ("my focal point is on my breathing"). By regularly employing his form of meditation, Arcaro performed very well (throwing "my lifetime best with only 75% of my strength"). However, he found other athletes to be uninterested in hearing about his use of meditation. Says Arcaro, "I went through a stage at first where I actively told people about it; but, very few people seem interested in what I'm doing. So now, I won't bother. It's too much of a hassle."

Arcaro contends that the initiative for trying a new mental training strategy has to originate with the athlete himself; prodding the athlete to try meditation or other mental disciplines rarely leads to lasting results. He states, "Learning meditation has to be done on your own. Your mind has to be open for it. If you discover it on your own, then you can't be any more open." In other words, the more you put into learning and applying a mental discipline on your own, the more you will get out of it. Bringing in a lecturer on mental training, having the coach hypnotize you, and similar contrivances are simply stopgap measures, Arcaro contends; they are not good long-term solutions. Instead, emphasizes the hammer thrower, "your mind has to be open" to trying out various mental disciplines; proof that your mind is open is if you check out a mental training strategy "*on your own*."

The constructive criticisms and suggestions of Knipp, Toomey, Donins, Arcaro, and many others eventually bore fruit. Dr. Nideffer describes what transpired:

In 1981, the USOC Sports Medicine Committee funded an elite athlete development project designed to provide special services to five targeted sports (track and field, cycling, volleyball, fencing, and weightlifting). One of the services to be offered was sport psychology, with a sport psychologist available for each of these sports. Athletes and coaches responded enthusiastically and other sport governing bodies became interested in integrating psychological factors into their training programs. Dr. Kenneth Clarke, director of sports medicine at Colorado Springs, was besieged by individuals who called themselves sport psychologists and wanted to offer psychological services. He also found sports governing bodies requesting those services.[42]

Assigning a sports psychologist to an individual sport made it practical to implement the type of one-on-one mental training work Janis Donins urged; an athlete could meet with the sports psychologist, discuss problems or whatever, and devise a personalized mental training program—all this much preferable to sitting through a necessarily generalized group lecture. This individualized service concept is excellent, but controversy arose on another front. The USOC decided to establish a registry, called the U.S. Olympic Committee's Sport Psychology Registry, of "qualified" sports psychologists. A major purpose of this registry is to assist the national governing boards (NGB) of the various amateur sports. If a NGB desired the services of a sports psychologist, it could request names of people listed in the Registry. The catch was: what qualifications allowed one to be included in the Registry? The USOC determined that an Educational Sports Psychologist—one who would mainly work with athletes on performance enhancement—needed to meet rather stiff requirements, they being:

(a) a doctorate in psychology, psychiatry, or a related field such as physical education, with a background in psychology that would meet the requirements for APA (American Psychological Association membership); (b) at least 3 years' experience as an athlete, coach, or practitioner in the application of psychological principles to sport; (c) reference letters from recognized institutions, organizations, and/or individuals attesting to the applicants teaching skills within a sport psychology perspective; and (d) a personal interview with a review board if eligibility cannot be determined from the preceding three requirements.[43]

These requirements, and similar requirements the USOC established for Clinical Sport Psychologist and Research Sport Psychologist, made many people unhappy and/or apprehensive. For example, Steven R. Heyman of the University of Wyoming offered several criticisms of the USOC Registry guidelines. One of Dr. Heyman's concerns was that "the USOC guidelines may have intensified tensions between individuals with backgrounds in physical education departments and those with backgrounds in psychology departments." [44] The reason for this is that "sports psychologists" possessing a Ph.D. in physical education might not meet APA membership requirements, thereby losing out to being listed in the Registry.

Dr. Kenneth Clarke, Director of the USOC's Sports Medicine Division, felt compelled to respond to Dr. Heyman's criticisms, and pointed out that after a year of USOC operation of the Registry, "provision for Registry eligibility was assured for both those coming out of physical education and clinical psychology." [45] Furthermore, he noted that "the Registry remains purely voluntary, however. A sports NGB can utilize anyone it wishes in the name of sport psychology." [46] What this means is that although someone like Arthur Ellen, a hypnotist whose work with athletes is legend, would not be included in the Registry (because he does not possess a doctorate in psychology, psychiatry, etc.), still the national governing boards of various sports, as well as individual athletes, could contract his services.

My position on the issue is that the marketplace, meaning the athletes and coaches, should determine who a qualified and good "sports psychologist" is. This determination should be made by the users, not some committee. If a "bummer" occurs due to the "sports psychologist" turning out

to be incompetent, arrogant, etc., primary blame still rests with the athletes and coaches, because they should have learned and practiced mental training on their own to begin with, without calling in an outsider to assume a responsibility that was theirs all along.

Thanks in part to the USOC's belated promotion of mental training, the services of sports psychologists were utilized by many U.S. Olympians in 1984. We shall now take an in-depth look at one mental training consultant's successful work with U.S. Olympic athletes in 1984. You will observe, in reading the following account, that this particular consultant does not hold in high regard shortcut mental training approaches; see if you agree with his perspective.

Ken Ravizza — Mental Training Consultant

One of the best track records in helping athletes learn and apply mental training has been compiled by Dr. Ken Ravizza of California State University, Fullerton. Dr. Ravizza earned his Ph.D. in physical education at USC, and has worked as a mental training consultant to many teams, both amateur and professional, for several years. At Cal State Fullerton Dr. Ravizza's services have primarily been utilized by the baseball team, men's and women's gymnastics team, and women's softball team. Interestingly, during the 1980s all of these teams were perennial powerhouses within their conference, with some of them going on to win national championships (though Dr. Ravizza will hardly take any credit for this).

Dr. Ravizza's professional training, as we noted, is in physical education, and this fact influences what he calls himself. He points out:

In the state of California, if you call yourself a psychologist, you're liable for that. So, I call myself a mental training consultant, performance specialist, whatever. In other states there is no problem calling yourself a sports psychologist. The irony is: any psychologist, though, can call himself a sports psychologist—and maybe his only experience with sports is he is starting to run marathons at 40 years old, and therefore he now knows the whole field of sports science.

The care Dr. Ravizza exercises in calling himself a "mental training consultant" (instead of "sports psychologist") extends over into his work with athletes and coaches. What he does is offer a comprehensive "state-of-the-art" program to those wishing to use his mental training services. This "state-of-the-art" approach contains these main elements: 1) the mental training consultant performs his duties with extreme *consciousness*, meaning he spends hours/days learning the sport, talking to the coaches, before even meeting with the athletes; then he devotes *tremendous amounts of time* to the athletes, conducting educational lectures as well as group and individual mental training sessions; 2) he provides each athlete handouts and tapes for the person to refer to as needed; both the coach and the mental training consultant work together to develop the tapes' contents; 3) participation in the mental training program is *voluntary* and all information remains *confidential*; 4) emphasis is on enhancing performance and repeating good efforts, rather than "putting out fires;" such techniques as imagery, deep breathing, developing a focal point, etc. are taught; 5) simulations of game situations are carried out, so that the actual competition will seem little different from practice, and therefore less stressful.

Keep the comprehensive nature of this mental training program in mind as we review Dr. Ravizza's work with the 1984 U.S. Olympic women's field hockey team. I interviewed Dr. Ravizza on January 28, 1986, and shall present in full his accounting of his experience with the field hockey team. The story will be lengthy, but highly instructive, because it shows how much effort is involved and required in doing a thorough and effective job, with no corner cutting, as a mental training consultant. Dr. Ravizza, with occasional questions from me interjected into the narrative, describes his work:

In 1982 I was contacted by the U.S. Field Hockey Association. They wanted someone to come in and work with the Olympic field hockey team in terms of sports psychology, mental training aspects. The coach, Vonnie Gross, was very progressive. She was very supportive and open to mental training. Now, she had two sports psychologists come in before, and it didn't go over too good with the team; the main reason, I think, (was because) the time they were brought in was not the most appropriate.

When I was asked to do this, I flew to Philadelphia that summer. I met with the coach, spent a day just talking to the coaching staff—I didn't even talk to a player. I went to a practice session and observed, talked some more to the coaching staff, and got a feeling for what was happening. Then, they had a big tournament in the Fall in Boston, and they flew me back. I went and observed. At the same time I spent a *lot* of time reading field hockey books. I just ate anything I could get on field hockey. At that point the only field hockey team in Southern California was Cal State Long Beach. I went over there and talked with their coach quite a bit about field hockey, trying to get a feeling for what the sport was about. Because this is one of the key things when you're doing mental training with athletes. You have got to learn their movement form; you have got to take the principles and theories of sports psychology and put them into practical application to that sport. If you don't do that, you're not going to be communicating with the players, and you're just another psychologist.

So, after going to this big international tournament in Boston, I then went to a 3-day think tank in New Haven, Connecticut at Yale University, with all of the elite level field hockey coaches involved in the national program present; you also had the biomechanics person, the exercise physiologist, and myself in the role of sports psychologist. We spent three days together, and I just sat there and listened and listened, took notes, and just really learned that much more about it.

The following summer (1983) I hooked up with the (national) team in Philadelphia, because their training camp was at Temple University. They had 30 people in training camp, and I went in and talked to them. I laid out a basic program, and started to get things rolling.

Then, three weeks later I met them at Colorado Springs where the Sports Festival was being held. This was where they were making the final selection for the Olympic team. The coaching staff decided they were going to select their team one year ahead of time, so that they could train as a team for a year, which I think *should* be done in team sports. Once that team was selected, the players no longer had to worry about making the team, and they really started opening up with each other and getting into mental training. Beforehand there was very little discussion. The player thought, "Why am I going to say anything if the person next to me sees that as my weakness? They could tap into that." But, once we got it down to the 16 members, we got into it (mental training).

The head coach, Vonnie Gross, was a very knowledgeable woman in terms of field hockey; she knew the game inside and out. At the same time, she valued the importance of the mental aspects of the game and having the players open up to her. So, that was part of what my role was—to be there and assist in that way. It helped the athletes deal with the pressures they were going to be facing, which I think was very astute on her part—that she can't get across to everyone, and that she wanted to make sure the players' needs were taken care of.

Then, in the Fall (1983) the team came out here to play in a tournament in Long Beach, and I spent three days with them there. When I spent time with them, what I would do is: part of the day would be spent working with them as a group—almost an educational program—talking about stress, how it affects performance, talking about concentration, things you can do in field hockey to get concentration, things you can do when you're having difficulties regrouping. A lot of it at that point was on how to get up for practice—quality practice time. We spent a lot of time on that because some of the players had been training for the Olympics for four years, some of them for

six years; trying to get up for today's practice wasn't always easy.

I laid out the program this way: we started with group discussion. And then after that we practiced relaxation. After the players got the relaxation down, we moved to imagery and visualization. We also did a lot with centering techniques, ways to maintain your concentration in game-like situations. I then worked with them on an individual basis for those that wanted it; this was voluntary, optional. If they wanted it, they could take advantage of it.

Stevenson: I presume some of the players did not want to work with you on the mental training on an individual basis.

Ravizza: Some did not. Well, they all went through the group sessions. We really did not have anyone who said, "I don't want it." We did have some who did not want individual sessions. I would talk with them about it, and we would come to an agreement. My thing with athletes is: "Hey look, I'm here to help you. Now I will ask you a lot of questions, but I want you to feel free to say 'Ken, you're bugging me—not now.'" And I don't have any problems with that; it's an arrangement that has worked really well. So, some of them didn't get into working with me on an individual basis.

Stevenson: Did you give the players any material on mental training that they could refer to whenever the need arose?

Ravizza: What we did was we had handouts that they could get to. Notes—the players took notes during these talks—they could refer to them. Then I made tapes—for the offensive players, they had a tape; the defensive players, they had a tape. And these tapes were made *with* the coaching staff. I was dovetailing what the coaches were saying. You had an integration between myself as an outside consultant coming in and doing the sports psychology and what the coach was saying in practice. The tapes contained the same vocabulary, the same things were emphasized; so, everything was being reinforced. And this is a big advantage over all those generalized sports psychology tapes of the "You're a champion, you're a winner" variety. I think these kinds of tapes are good on a general level, but I personally feel that they are a quick fix.

Shortly before the Olympics the team came to L.A. I went to the practice field with them. We had some group sessions. I was available at times to help people with relaxation, because it was getting crazy and intense. Sometimes after practice I'd have 10 people say, "Let's just relax." And I'd take them through 1/2 hour of relaxation. Other times we'd do imagery.

Stevenson: What was the imagery you used?

Ravizza: The players saw a lot of videotapes of themselves. When they saw a well-run play, I'd have the coach turn off the machine, and they would image that play after seeing it. I would work with them sometimes in terms of feeling themselves go through the play, and other times seeing themselves on a TV screen. Two things that are important with imagery: 1) you get down all the motor programming that's going on, the motor neurons firing and this type of thing; 2) but, the real power of imagery is in terms of developing concentration, so that one can learn to focus on a performance. When one's mind wanders, recognize that and pull it back.

When the team came to L.A. in January (of 1984) to play on the Olympic site against Japan, we had the players pick out focal points around the field—palm trees, a statue, whatever. And what this focal point was: it was a thing they were to look at and remind them that they are a hel-luva field hockey player—they've paid their dues, they've trained hard, they've worked hard, they're *ready*.

Then come the Olympics. We go out and the first game was against Holland. The Dutch were the superpower; they were No. 1 and the whole shebang. Here are our women in the tunnel. The crowd is chanting "U.S.A.! U.S.A.!" And these women had not had that much experience playing

in front of—field hockey is not a big crowd sport. So, now they are going out to 30,000 people. The feedback I got back from the players after the game was: besides the use of breathing techniques, the focal point so many times helped them. The world is going totally crazy around them, but that focal point was there. It kept them in focus. It reminded them to be “steady,” “calm down,” “get ready.”

The other thing we did was—and the coach was excellent and very supportive on this—during the week before the Olympics, we simulated coming to that first game. We followed the same routine every time. We would go to the practice field, spend a half hour on the field. We'd now move through the locker room. We'd go to the bathroom. We'd change and get everything ready, and now we'd go down to the tunnel and out to practice. So, every day this simulation was incorporated into the practice.

Stevenson: How did the team do against the Dutch?

Ravizza: We lost to the Dutch, but we played a very good game. In the Olympics overall we won a bronze medal, and we weren't picked to win a medal. Getting the medal, the team did that well. We ended up in a shoot-out for the bronze medal involving five Australian players, five American players. One American shoots, one Australian shoots, back and forth—pure concentration, pure stress. We hit 10 for 10, because each player takes two; we didn't miss one. Our goalie was excellent.

Now, it was not my mental training that was responsible for the team earning a medal. My mental training was one component of a coaching staff really working with the athletes, with athletes really paying the physical dues. Because one thing I want to make really clear is: I don't see magic in sports psychology. I think there have been a lot of people in the past making some wild claims about what can be done.

In my work with teams where I'm spending over 60 hours with a team, I'm not going in and having them walk on coals, or doing a quick hypnosis fix. The point I really want to emphasize is the *amount of time* involved in doing mental training work with athletes, in creating the relationship. You cannot come in and do a one-time deal because this always has minimum effect.

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Having read Dr. Ravizza's story of his work with the 1984 U.S. Olympic field hockey team, one sees more clearly why Dr. Unestahl contends that “it seems better to have a good coach who learns about mental training, than a psychologist who tries to learn about sport.” Dr. Ravizza went to great lengths to learn the ins and outs of field hockey, clearly sacrificing much of his valuable time to do so. But, most other mental training experts probably would not go to such trouble, and instead would pin their hopes on some quick fix approach. The field hockey team was most fortunate to have someone as conscientious as Dr. Ravizza work with them in 1984, but they might not be so lucky in the future. This is why Dr. Unestahl, Dr. Nideffer, and Professor Medvedev want coaches to learn mental training. With the coach as psychologist, the integration of mental training with the coach's directions proceeds smoothly and on a regular basis. Also, a short supply of mental training consultants and sports psychologists who go about their work in a professional and diligent manner will not affect a sports program whose coaches and/or athletes are their own psychologists.

An interesting section in Dr. Ravizza's commentary is where he advocates that selection of Olympic team squad members should occur one year before the Olympics. In his work he found that the field hockey players, having once made the squad, learned to be a team (that is, developed the team concept) and became much more open to mental training; their goal changed from making the team to working together as a team to do great in the Olympics. We recall Dr. Unestahl's

study of top Swedish soccer players—that 70% of them considered earning “a place on the team” their top priority goal, a goal they had already achieved! This making-the-team goal seems so ingrained in athletes that the question of who will play on the team should be settled as soon as possible. By doing so, coaches will have more time to fashion a cohesive, well-trained unit and instill amongst their players a “win the championship” outlook. Choose the team a year ahead of time, says Dr. Ravizza. This proposal certainly provides the athletes plenty of time to select for themselves the bold goals Dr. Unestahl recommends, like “winning the gold,” “going undefeated,” etc.—goals which generate interest, increase motivation, and boost morale. The proposal also takes into account the fact that feelings of uncertainty over one’s status on the team need to be quickly dissipated, for such feelings beget stress and, by consequence, reduced performance. So, for Olympic team sports, it makes sense that the team members be chosen one year or thereabouts prior to the Games.

Dr. Ravizza mentions how he had the field hockey players practice “relaxation,” that many players attributed their good performances to “the use of the breathing techniques.” A natural question arises: precisely what kind of “relaxation” did the Cal State Fullerton professor teach the field hockey team? Basically, he presented a progressive relaxation routine to the players. This routine is completely spelled out on a cassette tape Dr. Ravizza has produced and makes available. The tape, called “Point of Balance,” begins with Dr. Ravizza informing you, the listener, that “like any skill relaxation needs to be practiced.” [47] You are then instructed to find a comfortable, quiet place where you can lie down. Once in this position, you are then told to take a nice, deep breath, which is followed, not surprisingly, by a relaxed and steady exhalation. With soft, solo flute music in the background, Dr. Ravizza next presents these remarks and instructions on “Point of Balance”:

We begin life with an inhalation. We bring in the energy; we bring in the life force. And when we die, we exhale. We give that breath back. Every breath cycle is a mini life-and-death cycle, where you restore and recharge the body on the inhalation, and you remove the wastes from the body on the exhalation. As we go through these relaxation procedures, I want you to be focusing on your breathing, because when you hold the breath, you hold the tension.

Inhale . . . take a nice breath . . . and exhale, slowly letting the breath go. With each exhalation, let go of any unnecessary tension.

And now I want you to move your awareness to your left hand. Make a fist with your left hand, and gradually tighten that fist. Feel the tension build up as the muscle cells of the left hand become totally involved. Observe the tension, and now release. Let the tension go. Observe the left hand. Notice any differences from the right hand. Notice the temperature, the weight, and any sensations in the left hand.

And now move your attention to your right hand. . .

After the right hand is dealt with, other parts of the body in turn are subjected to similar tensing and untensing instructions. The philosophy behind this approach, according to the Cal State professor, is that “we are the ones who tighten the muscles; we are the ones who can release the tension in these muscles.” One finds Dr. Ravizza’s progressive relaxation method much the same as that used by Bud Winter, though Winter started at the jaw, claiming that “if your jaw is relaxed, it is a good bet your whole upper body is relaxed.” One thing not found on the “Point of Balance” tape is a combination of hypnotic suggestions with the relaxation; Dr. Ravizza’s tape deals strictly with stress reduction and relaxation—no hypnosis. Coach Winter, by contrast, urged his athletes to create a “mental set” while performing the relaxation. Creating a “mental set,” as noted earlier, is like giving yourself autosuggestions.

In working with his college’s gymnastics teams, Dr. Ravizza has the players follow a mental

Name _____
Opponent _____
Date _____

GYMNASICS MEET FEEDBACK

Please go into as much detail as possible because this will help me in working with you.

1. What specific stressors did you confront in this meet?
2. How did you experience your pre-meet stress?
3. Describe your feelings BEFORE & DURING the following events:
 Use the inverted “U”.

Vault

Bars

Beam

Floor

4. What techniques did you use during the meet to manage your stress?
 - A. WARM-UPS
 - B. PRE-PERFORMANCE
 - C. DURING PERFORMANCE
5. What did you learn from this meet to make yourself a better gymnast?
6. What was one thing you enjoyed in this meet?
7. Anything you want to say?

training program similar to the one he devised for the U.S. field hockey team. One nice element in his program is a “Gymnastics Meet Feedback” sheet, appearing on the preceding page, which he has the athletes fill out and turn in to him after each meet. Within 24 hours after the competition the gymnasts are expected to fill out and return the form; it is not something they have to do immediately. But, they should complete the sheet within a day (before recollection grows hazy).

Question #3 on the feedback sheet refers to arousal vs. performance. The inverted “U” is the shape appearing on a graph of an athlete’s performance, formed by gradations in the level of arousal (heart rate, body temperature, etc.). A chart illustrating this concept appears on the next page. When the athlete’s arousal level is low, so is his performance. As his arousal level increases, his performance increases and improves. At the top of the curve the peak performance area signifies that the athlete has also attained his optimal level of arousal. Eventually, as the chart shows, there comes a point where the athlete is too aroused, too emotionally charged up—his heart beating way too fast, etc.—and performance drops down. Therefore one thing Dr. Ravizza works with the gymnasts on is avoiding both ends of the chart, where arousal level is so low or so high that performance suffers. This entails developing the athletes’ awareness skills so that they can fine-tune their arousal level as needed.[48]

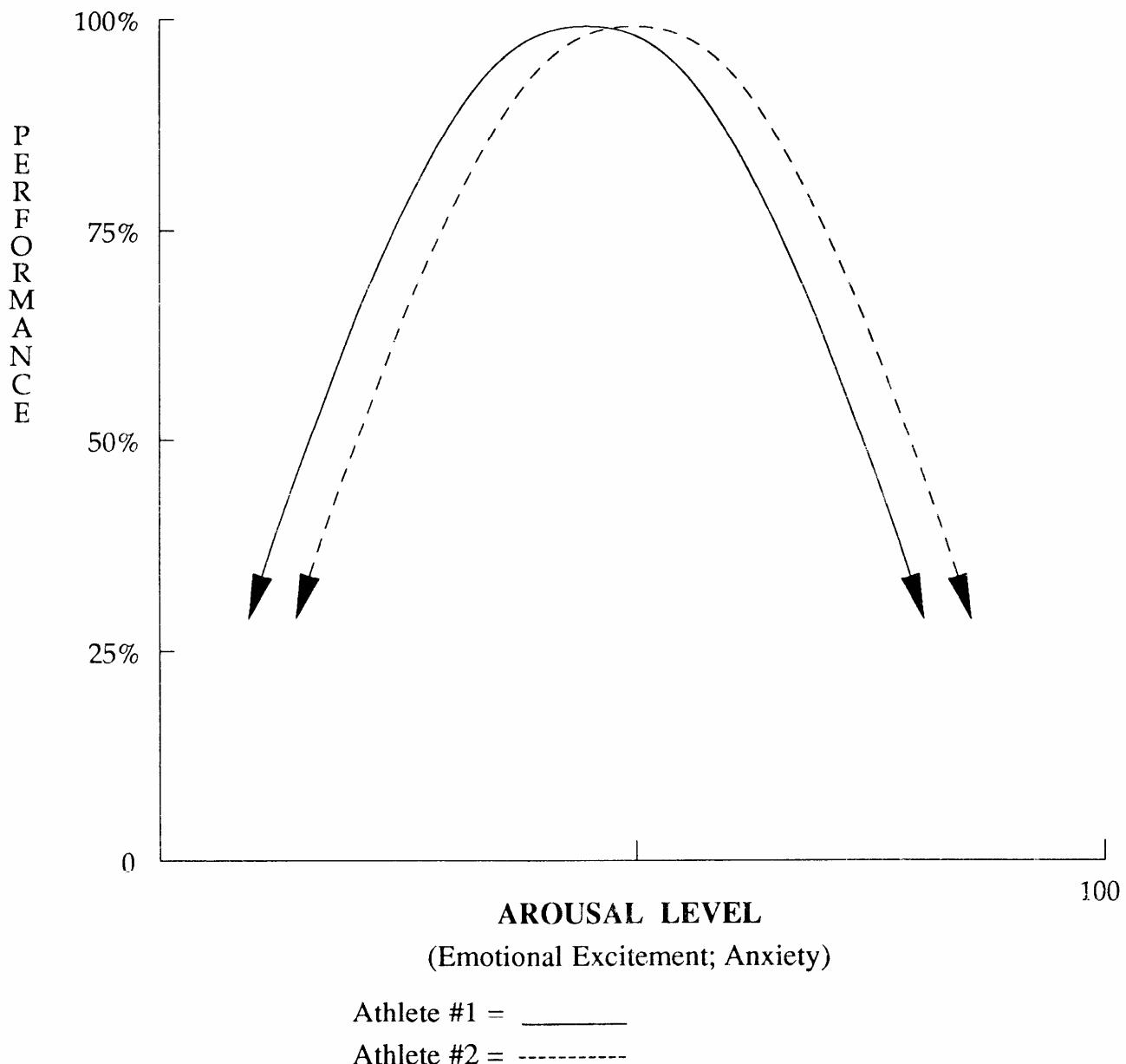
Dr. Ravizza uses “feedback” sheets, not only with the gymnastics teams, but also with the baseball and softball teams. By developing an on-going relationship with the athlete, something the feedback sheet (i.e., communication channel) encourages, rapport is usually achieved between the two parties; the overall approach, in short, serves as a good model for sports psychologists and mental training experts to follow.

As we have seen throughout this book, there are few time constraints on when one can practice mental rehearsal techniques. Unfortunately, many coaches are unaware that two birds can be killed with one stone—meaning that mental training can be done by the athlete at the same time he is doing something else. Dr. Ravizza takes advantage of this fact in his program. He states:

One of the comments I hear about mental training from coaches again and again is: “Ken, it’s wonderful; it’s fantastic. It’s really good stuff, but we don’t have time for it. We already got things we *have* to do; there’s no way we have time.” What I have done is incorporate a lot of the mental training into things the team is already doing. For example, the stretching period at the beginning of practice: that is a key time for such activities as breathing to relieve tension, concentration, and imagery. Also, the basic drills can become a concentration exercise.

Dr. Nideffer has also had coaches tell him the same thing—that there is no time to squeeze in mental training into existing workouts. Like Dr. Ravizza, he maintains that time for mental training can always be found in any sports program. In his *Athletes Guide to Mental Training*, Dr. Nideffer recalls the concerns of one unenlightened coach:

I remember hearing Britain’s National Rowing coach talking about how badly she wanted to include psychological training in the British program, but lamenting that the athletes had no time in their schedules for another activity. She pointed out they were up early for a practice before having to drive 1 1/2 hours in London traffic to get to work. They then worked all day and drove another 1 1/2 hours in heavy traffic for another workout and a meal. It was all they could do after this to just go to bed. She had not entertained the notion that much of the rehearsal and mental work in which the athlete would be engaging should be occurring during practice. It is during practice that you should be practicing concentration and tension control. Likewise, this coach had not considered the fact that in stop-and-go traffic, there are many opportunities to think of and to rehearse other things besides how irritated you are with the drivers around you and with the delays.[49]



The inverted "U" varies from athlete to athlete. An optimal arousal level for one athlete will not necessarily be an optimal level for another. Each athlete, therefore, needs to be individually tested to determine what his optimal level of arousal is. Such indicators as heart rate, body temperature, and skin conductance, when compared to performance, help define one's optimal and less-than-optimal arousal level.

In our Tennis chapter Bob Payan related how he gave himself autosuggestions while driving a truck one summer: "I tried to do this as much as I could while driving the truck, because driving is boring. I did this especially if I had a tournament coming up. . ." Payan went on to win three straight tennis tournaments, but that is not the point here. The point is, as Dr. Ravizza and Dr. Nideffer contend, you can use the stretchout period during practice to incorporate mental training; you can blend it into drill work as well. You can also perform various forms of mental rehearsal while driving (Jack Youngblood, we recall, practiced visualization while in traffic), or better yet for the athlete, while sitting in the team bus on the way to the competition. Bill Russell, remember, developed his "mental camera" visualization technique while riding on the team bus (see Professional Athletes chapter). So, coaches cannot with much justification cite lack of time as a reason to forgo incorporating mental training into their sports program.

As I mentioned earlier, the Cal State Fullerton varsity teams Dr. Ravizza works with (gymnastics, softball, and baseball) have done very well, with baseball, for example, winning the college World Series in 1984. Dr. Ravizza, smartly, takes virtually no credit for the teams' accomplishments, explaining:

I do not know what impact my work has on championships; I want to be real clear on that. I think the coaches are doing most of the work. I'm doing 1%. Now, that 1% in a high pressure situation can be crucial. All I guarantee to a coach is that: 1) the athlete is going to be more aware and more conscious of what he is doing on the field—that I will guarantee; 2) the athlete will enjoy his performance more. If those two things are going on, it is very likely that the performance will improve.

Though Dr. Ravizza downplays his contributions, positive reviews spread about his work. After the '84 College World Series, Marcel Lachemann, the pitching coach for the California Angels, contacted Dr. Ravizza about setting up a mental training program for the Angels pitchers. The Cal State Fullerton professor agreed to make a presentation to the pitchers, and see what interest the players would have in participating in a *voluntary* mental training program. Dr. Ravizza describes the developments:

Basically, I was brought in to work with the pitching staff. I went to Spring training (in 1985), spent a week there with the Angels pitchers, and presented the whole mental training program to them. I talked with them about concentration, relaxation, dealing with the pressure—most of it being performance-related. Out of 25 pitchers, 20 expressed interest in the program, said they wanted to go to more sessions, which they did while I was there.

Then during the season I was available. I would go down to the stadium on a home stand for two or three games, and I would be available to see the players one-on-one. And with the Angels—and what I see in professional athletics—it's all one-on-one. It's not going to be group session.

The Angel management brought me in to introduce the program, and then after that it was a matter of the players picking up. The players compensated me on an individual basis.

The initial presentation Dr. Ravizza made to the Angels pitchers occurred March 16, 1985, and was videotaped. This videotape, which I viewed, contains a lot of good tips about applying mental training to the pitching position. For instance, Dr. Ravizza says that a pitcher needs to concern himself with the time frame from when he catches the ball from the catcher to when he places his foot back on the rubber. Use this time to "regroup." Develop a "pre-pitch routine," he says. Whenever negative thoughts need to be dissipated (because the shortstop just made an error, etc.), this routine might call for the pitcher "picking up some dirt, going to the resin bag—let it go;" or, "maybe tighten your glove—let it release." At the same time the pitcher should face the outfield.

Only after the negative emotions have been released should the pitcher turn around. Because, as Dr. Ravizza incisively points out, "any time you're facing home plate, your energy is positive—you're up. Home plate does not deserve negative energy."

To establish the "pre-pitch routine," Dr. Ravizza informed the Angels pitchers that certain skills needed to be learned, such as relaxation and imagery. Again, the pitchers were notified that participation in the mental training program was voluntary, and that the program was designed to develop *consistency* in performance over a 162-game schedule. In terms of an arousal versus performance chart, Dr. Ravizza told the players they should strive to get their performance to regularly fall in the top quarter of the inverted "U"; this is a realistic goal, he went on, because during a long season very rarely can any pitcher perform at his absolute peak for more than one or two games.

There is little reason why athletes and coaches cannot become their own sports psychologists. The benefits of achieving self-sufficiency in one's own mental training are as numerous as they are substantial; plus, the ease with which one can develop this capability is well-documented, not only in this book, but in hundreds of other books and articles. However, despite all the resources available to help one become proficient in the use of mental rehearsal techniques, some athletes and coaches still feel the need to call in an outside expert. If you ever decide to enlist the services of a sports psychologist, keep in mind the conditions Bryant J. Cratty suggests should be in place and adhered to whenever such an undertaking is initiated. These conditions, spelled out in Cratty's book, *Social Psychology in Athletics* (1981), act to protect the athlete, and increase the odds that the mental training program will succeed:

1. The association between the team, coach, and social psychologist [Cratty's name for "sports psychologist"] should be a prolonged and professional one. It should last at least an entire sports season, and preferably longer.
2. The social psychologist should avoid excess exposure to the press. His job is to help the team's performance and the emotional health of all concerned, not to enhance his own reputation by seeking publicity.
3. The calling in of a behavioral scientist should be looked on as a form of preventive medicine, and should not always be a reaction to the onset of problems. Rather, the behavioral scientist's role should be looked on as a positive one, meant to enhance performance, rather than only prevent a future problem or reduce a present one.
4. The athletes often-limited time and energy should be considered at all times, by both the coach and psychologist, when setting up an evaluation and counseling program. Personal counseling should be optional, not mandatory.[50]

Fulfilling the requirements of Condition #1 is not only desirable, but quite attainable. For example, Dr. Ravizza worked with the Angels pitching staff again during the '86 season, and for the '87 and '88 seasons helped batters as well as pitchers. "About half" of the team, he reports, utilized his mental training expertise. (Since 1989 Dr. Ravizza's assignment with the Angels organization has been to assist their minor leaguers.) As for the remaining conditions, we can see that they were easily adhered to by Dr. Ravizza in his work with the Olympic field hockey team, let alone with other clients. So, putting two and two together, we see that Cratty's guidelines are far from impossible to meet; instead, they are definitely within reason.

Having now presented you many sound mental training approaches in this chapter, all that remains to be seen is what reasonable course of action you will take to improve your mental preparation capabilities.

FOOTNOTES

1. Bud Winter, *Relax & Win: Championship Performance in Whatever You Do*, (San Diego, California: A. S. Barnes, 1981).
2. Ibid.
3. Ibid.
4. Ibid.
5. Ibid.
6. One feature of Winter's "relaxation routine" was its elimination of wrinkles on the forehead—further evidence that the technique can rightfully be called hypnosis. As Leslie LeCron, author of *Self Hypnotism* (1964), states in his book, "One of the signs of hypnosis is a smoothing out of the facial muscles, with a lack of expression shown. . ."
7. Winter, *op. cit.*
8. Frank Schubert, *Psychology from Start to Finish*, (Toronto: Sport Books Publisher, 1986), p. 97.
9. Ibid., pp. 97-98.
10. Ibid., pp. 99-100.
11. Y. G. Kodzhaspirov, "Monotony in Sport and Its Prevention Through Music," *Soviet Sports Review*, September, 1985, Vol. 20, No. 3, p. 105.
12. Ibid.
13. Ibid., p. 106.
14. Ibid.
15. Ibid., p. 108.
16. These three tapes are available from: VEJE, Box 16017, S-70016, Orebro, Sweden.
17. Lars-Eric Unestahl, "New Paths of Sport Learning and Excellence," (published by: Department of Sport Psychology, Orebro University, Box 16017, Orebro, Sweden), p. 3.
18. Ibid., p. 11.
19. Ibid., p. 7.
20. Ibid., p. 8.
21. Ibid., p. 10.
22. Ibid.
23. Recall that this is exactly what gymnastics champion Boris Shaklin did ("I would think of an exercise that I had done particularly well in the past, and my muscles would feel the rhythm. That's all.")
24. Unestahl, *op. cit.*, p. 13.
25. Ibid., pp. 13-14.
26. Eugene F. Gauron, *Mental Training for Peak Performance*, (Lansing, New York: SportScience Associates, 1984), p. vii.
27. Robert M. Nideffer, *Athletes' Guide to Mental Training*, (Champaign, Illinois: Human Kinetics Publishers, Inc., 1985), p. 43.
28. Prior to the 1984 Olympics Dr. Nideffer, as President of Enhanced Performance Associates, worked with Canadian divers and Australian sprinters, for which he was remunerated. He also voluntarily helped '84 U.S. Olympic track and field athletes with their mental preparation, receiving only expenses. Beth Ann Krier, *L. A. Times* reporter, asked Dr. Nideffer if he would work for the Soviet Olympic team. Responded the sports psychologist: "Of course I would. I'm interested in the performer, not his or her country. I'd work for Stalin if I thought I could make him a better person" (see "Olympians Exercising in Mind Arena," *Los Angeles Times*, June 7, 1983). Whether Dr. Nideffer would work with Stalin *for a fee*, I'll leave up to the reader to decide.
29. Nideffer, *op. cit.*, pp. v-vi.

30. As a corollary to this, Dr. Nideffer offers relaxation tapes for athletes experiencing difficulty in sleeping the night before a major competition. These tapes are available from: Enhanced Performance, 12468 Bodega Way, San Diego, CA 92128.
31. This publication is available from: *Human Kinetics Publishers*, Inc., Box 5076, Champaign, Illinois 61820.
32. For subscription information, contact: *Soviet Sports Review*, P. O. Box 2878, Escondido, CA 92025.
33. John M. Silva and Robert S. Weinberg, ed., *Psychological Foundations of Sport*, (Champaign, Illinois: Human Kinetics Publishers, Inc., 1984), p. 146.
34. Ibid., p. 149.
35. Ibid.
36. Ibid., p. 155.
37. Ibid.
38. Ibid., p. 153.
39. Ibid., p. 154.
40. Ibid., pp. 154-155.
41. For membership information contact: AAASP, c/o Jean Williams, Exercise and Sport Science Dept., University of Arizona, Tucson, Arizona 85721.
42. Silva and Weinberg, *op. cit.*, p. 39.
43. Ibid., p. 43.
44. Steven R. Heyman, "The Development of Models for Sport Psychology: Examining the USOC Guidelines," *Journal of Sport Psychology*, Vol. 6, No. 2, 1984, p. 131.
45. Kenneth S. Clarke, "The USOC Sports Psychology Registry: A Clarification," *Journal of Sport Psychology*, Vol. 6, No. 4, 1984, p. 366.
46. Ibid.
47. For information on this tape and other mental training aids Dr. Ravizza markets, contact: Kinesis, 530 Idaho, Santa Monica, CA 90403.
48. The Cal State Fullerton professor has apparently succeeded in this endeavor. According to Dick Wolfe, head coach of the men's gymnastics team at CSF, "our athletes are becoming aware of themselves and that they're responsible for their actions" (see "He Helps People Ease Pressure," *Los Angeles Times*, March 2, 1984). Dr. Ravizza, continues Coach Wolfe, "has made a difference to the gymnasts since I let him come on my turf four years ago. It has taken quite a while but some of the guys are finally admitting they're full of stress and at times were afraid. I guess it was a macho thing not to tell us."
49. Nideffer, *op. cit.*, p. 81.
50. Bryant J. Cratty, *Social Psychology in Athletics*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1981), p. 287.

MENTAL TRAINING STRATEGIES TIME LINE
(MENTAL TRAINING INTO THE 21ST CENTURY)

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Mind-and-Body Sports Club
(Idea advocated/bankrolled by Rod Carew and others whereby members can train themselves physically and mentally under the same roof)

Beta to Theta Type Tapes
(Such tapes slow down the brain-wave activity level, resulting in enhanced suggestibility; Dick Sutphen urges Beta to Theta tapes for martial arts students and other athletes desiring accelerated learning; Yogi Wassan says only way to truly relax is through use of *tones*)

Subliminal Audio Tapes
(Positive statements on such tapes reputedly reach one's subconscious without the person having to relax or go into a trance; many companies market subliminal sports tapes; some firms sell devices allowing one to play subliminal messages which are masked by constantly changing background music, coming from one's radio, CD player, etc., forestalling monotony)

Mental Training Videotapes

(SyberVision videotapes, showing scientifically edited action of sports models, used to advantage by many athletes, including Stanford Men's Tennis Team; subliminal videotapes reportedly doubly effective as messages are heard *and seen* by one's subconscious; video hypnosis tapes even more powerful, as they address both the conscious and subconscious mind)

Designated Psychologist

(Another name for team sports psychologist, to be employed all season by baseball teams; the Angels and Pirates try out the concept)

Computerized Biofeedback

(Dr. Landers says technological advances make real-time self-monitoring capability imminent; archer champion Rick McKinney helped out by this technique)

MENTAL TRAINING INTO THE 21ST CENTURY

There can be little doubt that mental training now rests on a solid foundation. After years of experimentation and practical application, its basic core—the regular practice of self-hypnosis and visualization—has been conclusively proven to provide substantial benefits to athletes. Building upon this foundation, mental training advocates are devising new ways to improve athletic performance; concurrently, the integration of mental training with physical training at the elite athlete level is proceeding with rapidity. While it is impossible to describe here all of the frontiers of mental training being explored, some of the more interesting concepts and research deserve mention.

Mind-and-Body Sports Club

Baseball great Rod Carew has helped put into effect a novel idea. He linked up with hypnotist Harvey Misel and ballplayers Bill Buckner and Eric Soderholm to establish a mind-and-body sports club in the Chicago area.[1] Carew discussed the concept with me, stating:

Harvey Misel and I talked about it before the club really got into the planning stages. I told him that I thought a mind-and-body sports club would be really great because to hit a baseball you have to concentrate. To hit a receiver in football you have to concentrate. With a golfer it's the same thing: he has to concentrate on hitting the ball, and his swing. I told Harvey if you can get athletes interested in hypnosis, it's going to make their job a lot easier. I also said I don't think people will shy away from a club offering hypnosis; because they're going to find out it will help them.

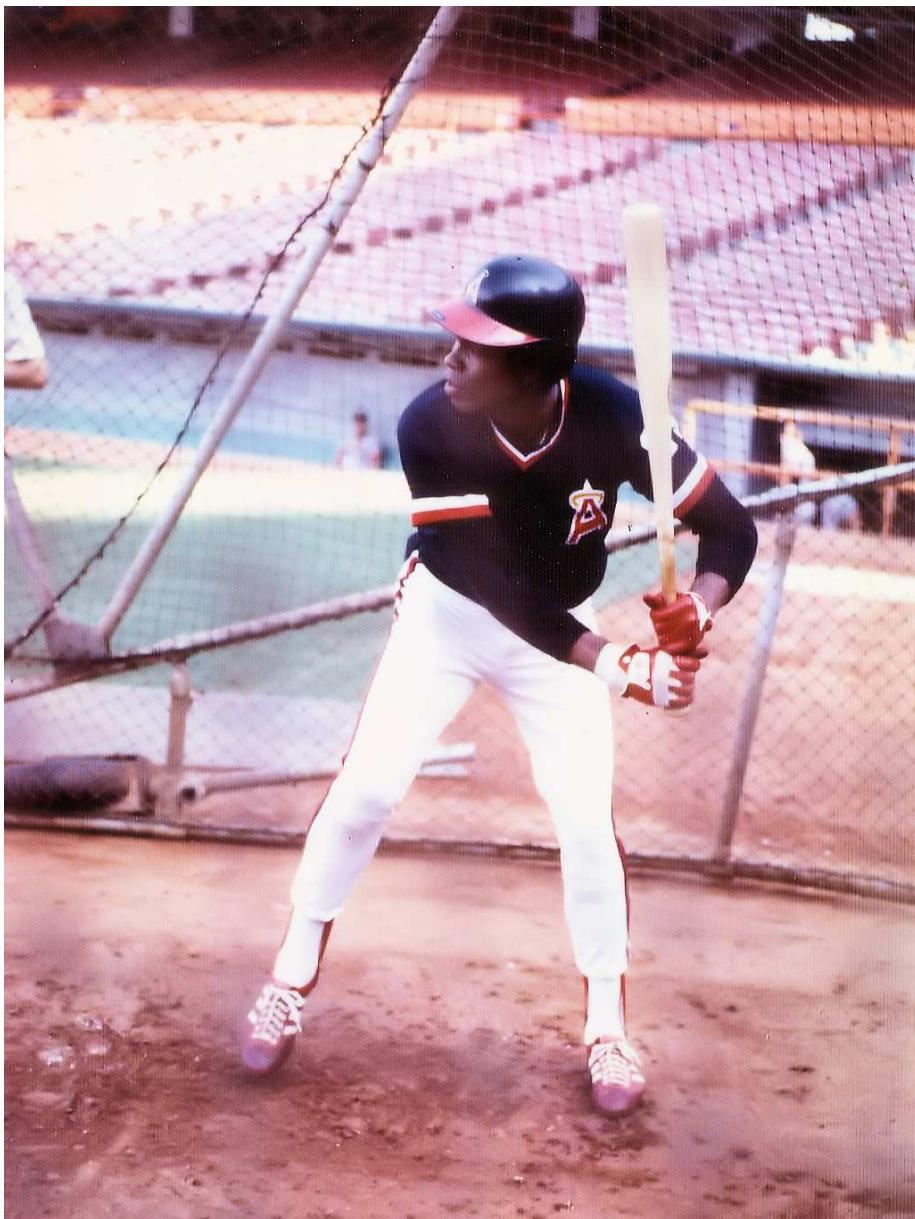
The mind-and-body sports club concept brings together physical conditioning and mental preparation. Both services are offered under the same roof. Carew's recommendations can be said to be: 1) establish mind-and-body sports clubs across the country. The easiest way for this to occur would be for pre-existing clubs to incorporate mental training into their overall fitness program; 2) athletes and others should patronize such clubs. Not only can club members work on their physical conditioning, but, says Carew, "they're going to find out it (hypnosis) will help them." Presumably, after finding out how helpful hypnosis is, the members will become enthused about the discipline and practice it regularly.

Carew describes athletics as being 100% physical and 100% mental—not simply 50% of both. "And," he adds, "it's not only athletics, but it's also true in private life, for the man who works from 9 to 5." For this reason he strongly supports the mind-and-body sports club idea. Nonathletes as well as athletes can join such a club, and strengthen their body and mind to handle daily stress. Mind-and-body sports clubs are not yet widespread, but the one in Chicago is going "pretty good," Carew informed me in November, 1982. Until such clubs become more prevalent, you will have to look elsewhere for instruction on proper mental preparation, and motivate yourself.

DP — Designated Psychologist

Correspondent Stan Hochman of Knight-Ridder newspapers came out with a cleverly coined proposal in a 1983 article. He offered this suggestion for professional baseball teams:

A DP, a designated psychologist. It's an idea whose time is long overdue. You could put together two contending clubs with the players who caved in under stress and left the game too early, having given us only a glimpse at their talent.[2]



(Bob Stevenson photo)

Rod Carew, seven-time American League batting champion and mind-and-body sports club advocate, began using hypnosis in 1976 to improve his concentration. His hypnotist, Harvey Misel, gave him such suggestions as "visualize the ball," "visualize the bat making contact," and "concentrate on the pitcher."

According to Hochman, the designated (team) psychologist would be retained by the club; his services would be available to players and coaching staff alike. "A professional help program would have to start at the top," observed the reporter, meaning that management would have to take the initiative in hiring a team psychologist. Along these lines, Hochman reported that the Philadelphia Phillies were considering hiring Dr. Tom McGinnis to serve in such a capacity. Dr. McGinnis, not too surprisingly, felt such a move was needed. He stated:

I've had managers tell me a player is depressed, paranoid, immature, anxious, has marital problems, is a compulsive drinker. All the problems I face in my regular practice.

...The players are hungry for this (having a team psychologist). It would lengthen careers, they'd play more happily. The owners would benefit.

Managers and coaches say the average player improves physically only about 6 to 8 percent. That's not very much.

But there's another dimension, where vast improvement lies untapped and often unnoticed. The mind, the psyche, a player's insides. Most of us have emotional scars from growing up. A professional athlete is no different.[3]

To tap the person's potential, the mental rehearsal technique of choice Dr. McGinnis employs is self-hypnosis. He says:

I teach self-hypnosis to all my patients. It's the best psychological tool to use in a stress atmosphere. I have pitchers in the big leagues who can step off the mound in a jam, enter a momentary state, and then step back to pitch.[4]

Dave Bristol, former manager of the San Francisco Giants, informed Hochman that Dr. McGinnis "helped me in 1980" when the Giants had been "struggling and it was taking its toll on me." Because of Dr. McGinnis's help Bristol seconded the designated psychologist idea, remarking, "I hope some team will hire a psychologist. It will only happen when someone gets enough guts to do it."[5]

Employing the services of a team psychologist is really not a new idea, as we have seen throughout this book, though the concept has met with some resistance at the professional baseball level. But, even here walls are coming down. The Pittsburgh Pirates, for example, hired Dr. William Harrison to serve as a team psychologist during the 1986 season. *Sporting News* columnist Stan Isle reported that Pirates General Manager Syd Thrift made this investment because he believed Dr. Harrison could "help Pittsburgh players develop 'positive visualization,' a technique Thrift said 'worked wonders' several years ago for the Royals' George Brett."[6] Revealing a commendable grasp of what visualization involves, Thrift told Isle that "good hitters see the line drives before they go to bat. Bad hitters see pop-ups and fly balls." Besides working with the players on their visualization skills, Dr. Harrison was also to "administer athlete-related eye tests," added Isle. The '86 season concluded with the Pirates compiling a dismal 64-98 record, earning them last place in the National League East. This showing, however, says little about the effectiveness of Dr. Harrison's work; for other factors besides the presence of a team psychologist, such as the talent level of the players, their conditioning, etc., greatly impact on a team's overall performance. What one can say, without investigating the matter further, is that at least the Pirates management's intentions were good in exposing their players to mental training.

Other professional baseball teams reportedly use sports psychologists nowadays, though these reports are often difficult to confirm—the mental training programs remaining low key and/or unpublicized, as in the case of Dr. Ravizza's work with the California Angels. Another example demonstrating this state of affairs surfaced in 1989, as it was revealed that Tom House, pitching coach for the Texas Rangers, also wears the hat as sports psychologist for his team's hurlers.[8] Coach House, who possesses a Ph.D. in psychology, has put many of his pitchers through hypnotherapy sessions, as well as given them subliminal tapes to listen to. To what degree have the sessions and tapes proven beneficial? Again, the impact of these mental training strategies would best be ascertained by talking directly to those Rangers pitchers who tried them out, as a baseball team's won-loss record reflects many things besides the psych-up capabilities of the pitching staff.

As additional professional baseball teams recognize the legitimate role mental training can

play in a player development program, arrangements between baseball management and sports psychologists will become more prevalent, though not necessarily more evident. Currently such arrangements are widespread at the Olympic team sports level, both in the U.S. and abroad, and we have already witnessed how teams in other professional sports are also getting into the act.

Computerized Biofeedback

In a fascinating August, 1985 *Omni* magazine article (see "Ultra Sports"), Mark Teich and Pamela Weintraub reported on sports psychology research that borders on the fantastical. The work of Dr. Dan Landers, psychologist at Arizona State University, is especially noteworthy in this respect. Says Teich and Weintraub:

(Dr. Landers) wires his athletes with electrodes that measure heart rate, temperature, brain waves, and muscle activity during training. By analyzing these data on a computer, he can often tell why athletes go into a tailspin. He then uses biofeedback to eliminate the problems they may be having.[9]

The writers go on to cite instances where Dr. Landers helped certain athletes. For example, world class archer Rick McKinney used biofeedback to overcome an unconscious squinting habit that had been adversely affecting his performances. This was accomplished like so. Dr. Landers, state Teich and Weintraub, connected "an electrode from the muscle under McKinney's eye to the computer. He then had the computer's amplifier 'crackle like firecrackers' every time the electrode detected muscle activity." According to Dr. Landers, "The sound was so loud it helped him concentrate on what was going on. After just ten arrows he'd reduced that squint to a blink. Soon even the blink was gone."[10]

While this type of work with biofeedback is not particularly unique, Dr. Landers' future efforts will be. The Arizona State University psychologist plans to teach tomorrow's athletes how to use biofeedback to "achieve the optimal mind-set for each situation." Such instruction will be combined with technological advances in biofeedback instrumentation, providing the athlete a real-time, self-monitoring capability. The athlete will be able to adjust his mind-set as needed—as indicated to him by the computer—*during actual competition*. Teich and Weintraub describe exactly what Dr. Landers has in mind:

Each year, he notes, computer components grow smaller, and it may soon be possible to make a heart, brain, or muscle sensor the size of a dime. These sensors, attached to the athlete's body or clothing, would radio information to a nearby computer for analysis. An instant biofeedback tone would be transmitted from the computer to a tiny plug in the athlete's ear. "This is imminent," Landers predicts. "We've got to put the components together, but most of the basic technology is there."[11]

When this technology is perfected and applied, it will be interesting to see if rules are adopted by sports governing boards disallowing its use. Because what you would have is a situation whereby a machine—the computer—is aiding the athlete *during* competition. Proponents of the computerized biofeedback technology will no doubt claim that really it is the athlete aiding himself; but, this occurs only thanks to the computer-generated signals provided the athlete. While it is unobjectionable for athletes to utilize the assistance of machines and computers to get in top physical and mental condition before competition, one can imagine resistance arising to allowing an athlete-machine combination to exist during competition; this, opponents will probably argue, is carrying the peak performance concept too far.

Subliminal Audio Sports Tapes

It was only a matter of time before subliminal messages, an idea dating from the 1950s, would be adapted for sports applications. "Subliminal" means "being perceived below the threshold of consciousness", and nowadays athletes can supposedly program their subconscious without having to go into trance states or engaging in deep relaxation; subliminal audio sports tapes are said to make this possible. Though subliminal means not consciously perceivable, there are several companies who, however, do wish to be known to the public.[12] Because space does not permit me here to name all these firms, I shall move on to the more important objective of providing you a better idea of what such audio tapes are about. In attempting this I will compare two outwardly similar subliminal tapes. Each tape, though addressing the same sport, differs from the other to a degree. Why this is so we'll soon see.

Psychodynamics Research Institute makes available subliminal audio tapes on Baseball, Bowling, Bodybuilding, Running/Walking, Golf, and Tennis. The messages on the tapes, normally inaudible, are softly spoken, and are masked by either pleasant music or nature sounds (such as the sound of a flowing stream). Despite the inaudibility of the words, Psychodynamics Research Institute (PRI) contends in its catalog that "the subconscious mind picks up impulses from the ear that the conscious mind cannot hear." The messages are also time-compressed, delivered at the rate of 250-300 words per minute. At this speed, says PRI, "the subconscious is most comfortable processing information," though it is a rate "much faster than the conscious mind can function."

In May, 1986 I obtained PRI's Tennis tape to see what it could do for me. I listened to it for four consecutive nights while going to sleep, and found it easy to listen to. Only on one side of the tape could I hear in a couple of places during pauses in the music what sounded like a cross between fast whispering and the wind blowing; I could make out no words, however. On the other side of the tape all I consciously heard was the water rushing and ocean waves breaking on the beach. Two days after listening to the tape for the fourth time I played a set of singles against my old-time opponent, Pete Stokke. Pete and I are even in ability; I had not played tennis in two months, while my opponent had been active. Somehow, despite rustiness in my game, I won the set, 7-5.

For \$1 Psychodynamics Research Institute will provide you a script of the tape's message, if you have possessed and presumably listened to the tape for three weeks. PRI claims that the effectiveness of a subliminal message "is diminished when the suggestions are consciously known," and this is why they do not initially include the script with one's order. After my unexpected victory over Pete, I was curious enough to send in my dollar. The script I received for the Tennis tape contained a surprisingly sophisticated message (as far as mental training messages go). Many of the statements can apply to any sport, a representative sample being:

My mind and body will become working partners. I am programming myself for increased strength, coordination, vision, and judgement. Day by day, every muscle in my body is becoming toned. My strength and endurance are steadily increasing.

The statements were of a general nature, and they did not ring a bell to my conscious mind upon my reading them. But, then again, subliminal messages are designed to address and program one's subconscious anyway, not one's conscious. Under the circumstances I believe all an athlete willing to give subliminal sports tapes a try can do is closely monitor his performances and workouts. The amount of improvement, if any, will be the main indicator one should go by in judging the effectiveness of such tapes. In my case the Tennis tape perhaps helped me; it is hard to say.[13] If nothing else, though, the music and nature sounds were conducive to relaxation and the reduction of stress, serving the same beneficial purpose as the Music tapes mentioned in the Tennis chapter.

Mind Communication, Inc. also puts out subliminal audio sports tapes incorporating time-compression techniques, with either music or nature sounds once again serving as the mask. The sports their tapes cover are: Tennis, Golf, Weightlifting, Running, Basketball, Bowling, Football, Skiing, Swimming/Diving, Boxing, Racquetball, and Baseball/Softball. In its catalog Mind Communication opts for full disclosure, i.e., it includes the script contained on each tape. The messages are generally quite short and direct. The Tennis tape, for example, is professed to contain such statements as: "I play the net well," "I pick a spot," "I swing smoothly and powerfully." Mind Communication asserts in its catalog that brief messages "are easily accepted by the subconscious mind," while the use of the word "I" is justified because that is how "the subconscious mind... sees itself: as 'I'" It can be seen that the messages of Mind Communication's tapes differ substantially from the lengthier, more generalized messages submersed on PRI's tapes. Whether this difference is significant can only be determined by the athlete experimenting with the two types of subliminal tapes (I did, and found that one of the two seemed to help me more). Because each individual's personality is unique, some athletes can be expected to derive more benefits from generalized messages, while others will experience greater success from listening to brief, more-to-the-point messages. Still other athletes will likely obtain no benefits at all from any subliminal sports tape.[14]

Assuming subliminal sports tapes are helpful, their big advantage over other mental training approaches is that the athlete can program his subconscious mind without having to learn a mental skill, such as visualization or self-hypnosis; reliance on the services of another in aiding one with his mental preparation would either not be required or greatly lessened, resulting in a substantial saving of money as well.

The major disadvantage of a subliminal audio tape—a disadvantage shared by most other types of mental training tapes—is that the tape's message remains constant, while circumstances and the athlete's needs might change. The tape's message, by not adjusting to the changing needs and circumstances, may prove inapplicable to the situation at hand, and therefore ineffective (see the Baseball chapter for a related discussion of sports hypnosis tapes).

Another drawback to such tapes is that the background music remains the same; and, repeated listening to the same music can, in Kodzhaspirov's words, lead to "early fatigue, poor attention and watchfulness" on the part of the athlete—in short, behavior reflecting boredom (refer to Kodzhaspirov's study in the Recent Developments in Sports Psychology and Mental Training chapter). Both Mind Communication and Psychodynamics Research Institute recognize this pitfall of subliminal tapes; they offer instruments allowing you to play subliminal messages as you listen to continuously changing background music of your choice. Mind Communication's unit, called the Q-System Decoder/Mixer, appears particularly versatile, as it can be hooked up to virtually any source of music (radio, CD player, etc.).

"Beta to Theta" Type Tapes

Dick Sutphen, a hypnotist and prominent New Age movement leader, has developed two useful mental training audio tapes for athletes to consider. These tapes, marketed by Sutphen's company, Valley of the Sun Publishing[15], are:

1) Beta to Theta Tape. This tape is 30 minutes long, and contains clicking sounds. The clicks are rapid at first, but slow down over a five minute period. At the end of five minutes they remain clicking at the new slower rate for the balance of the tape (25 minutes). The initial rapid clicking, contends Sutphen, corresponds to the 850 cycles-per-second brain-wave activity level present during the Beta state of consciousness (normal, waking conscious state; refer to the discussion of

brain waves in the Introduction chapter). As the clicking sounds slow down, so do one's brain waves, because of the mind's predisposition to align itself to the audio input. Soon an Alpha or Theta state of consciousness comes about, meaning, an altered state of consciousness is reached whereby one is highly susceptible to suggestions. At this point the athlete can give himself hypnotic suggestions, which will likely take hold.

Sutphen first discussed this concept in an eye-opening March, 1979 *Black Belt* magazine article, stating:

Researchers have found that an amplified clicking sound (a metronome, for example) slowing down from 850 to 144 beats per minute over a five-minute period of time will induce an altered state of consciousness in most people. Although their eyes will be open, they will be highly suggestible. Suggestion is at least 20 times more effective in an altered state.[16]

Sutphen, a master karate practitioner as well, went on to report that he had developed a martial arts videotape, demonstrating proper technique, which a class could watch while concurrently listening to a beta-to-theta tape. Holding such a session, he thought, would lead to accelerated learning. "Traditionalists," observed Sutphen, "may reject these ideas, and I can understand their feelings, but we are living in a period of high acceleration. Just because you can achieve a desired result more quickly doesn't make it less valid."^[17]

2) Hypnagogic Sound Vibration Tape. This tape also attempts to induce the Theta state of consciousness, employing to that end a variety of sound effects (synthesized music, unusual static sounds, the thumping of a heartbeat). Again, the main function of such a tape is to facilitate the athlete's self-administration of effective hypnotic suggestions or positive visualizations.

Both tapes, unlike subliminal tapes, quite meritoriously allow you to program yourself; and, as has been pointed out before, self-programming is generally more effective than programming given you by another (a coach, sports psychologist, hypnosis tape, etc.).

There is the possibility that Sutphen's use of sound to induce Theta level consciousness is much superior to traditional mental relaxation approaches. As Yogi Wassan, in his classic book, *Secrets of the Himalaya Mountain Masters* (1927), states:

You cannot relax by willing, or ordering muscles to relax, or by any other kind of mental effort, because the vibratory effect of mind is to tense the muscles through which the mind energy passes.

... But you can relax every muscle by appropriate **bodily action**—that is, by the use of **tones** which vibrate the body. . . . You bring the body into relaxation and rhythm through the use of *Mantra Yoga*, or Chants. . .[18]

It would be no surprise if the rhythm and number of chanted words Yogi Wassan advises one to practice closely correspond to the 144 evenly-spaced beats per minute found on the Theta portion of the Beta to Theta tape. For the Yoga Masters, having performed their art over thousands of years, probably discovered eons ago the principle which Sutphen has recently transformed into a technologically convenient form (a tape).

Out of curiosity I introduced the Beta to Theta tape and Hypnagogic Sound Vibration tape to a few athletes I work with, and not untypically they rendered a split decision as to which tape they preferred. So, should you investigate the matter further, you will probably want to try out both yourself, and see which one you like best. This, of course, is well worth the effort, should either tape assist you in maximizing your full athletic potential.

Other tapes falling in the beta-to-theta category are those offered by the Conscious Living Foundation. Called Holographic Music, these tapes employ interesting musical tones, and attempt

to synchronize and slow down brain-wave activity such that after 25 minutes of listening one achieves a Theta (4 to 8 Hz.) state of deep relaxation. The tapes, I found, permit easy self-programming via visualization or autosuggestion, and, in general, are more pleasant to listen to than Sutphen's.[19]

Mental Training Videotapes

For quite some time videotapes have been used by athletes and coaches to analyze technique, performance, as well as the tendencies of one's opponent. Now, individuals and companies are developing and marketing sports-related mental training videotapes. The company which seems to have expended the most effort in this area is SyberVision Systems, Inc. In their catalog they offer separate mental training videotapes for such sports as: Tennis, Baseball, Golf, Cross-Country Skiing, Downhill Skiing, Bowling, Racquetball, and Self-defense (martial arts). Four audio tapes, plus an instruction booklet, usually supplement each videotape; also, a book, *Muscle Memory Programming for Every Sport* (1981) by Steven DeVore and Greggory DeVore, which details and describes the benefits of the SyberVision program, is often included with orders.[20]

In our Amateur Athletes chapter we noted the recommendation of Loudis *et al* to watch your sports model on television, keeping the sound turned off, and you were to relax while doing this—the purpose of this exercise being to ingrain proper athletic movements and technique into your subconscious. We observed, however, that one's sports model does not appear on TV that frequently, and really it would be best to possess a VCR to videotape the desired athlete in action so one could view the correctly performed skills at any convenient time. What SyberVision has done is: 1) overcome all the impediments (editing difficulties, etc.) one would encounter in creating his own sports model videotape; 2) make videotapes based on the scientific findings of Dr. Karl Pribram, Head of Stanford University's Neuropsychology Research Laboratory. Dr. Pribram, the SyberVision catalog tells us, discovered that "the brain follows the properties of a mathematical equation—the Fourier Transform—which enables images to be transformed into skills and behavior."

What are SyberVision's videotapes like? I obtained the one on Tennis, which features Stan Smith, former Wimbledon and U.S. Open champion; Stan was chosen for the videotape because he is considered to possess a classic and pure tennis style, and therefore can serve as a sports model for tennis players. In viewing the tape one sees Smith hitting various tennis strokes—the serve, forehand, backhand, forehand volley, backhand return of serve, overhead smash, and so on. Each stroke is repeated approximately 90 times in succession, though to forestall monotony the shot is shown from different perspectives, with slow motion sequences also interspersed. To amplify, the stroke is first shown from a front-on angle, and is performed 15 times; then, the same stroke is shown from the side (again hit 15 times in succession); the shot is coupled with the sound of Smith moving into position and hitting the ball. The side angle is next repeated many times in slow motion, while pleasant music is softly played. After the slow motion sequence, a computerized white dot person, superimposed against a blue background, executes the stroke. Then, the sequences showing Smith hitting the same shot 15 times in succession are repeated in reverse order. Following this appears the next type of stroke, which is presented in the same manner. The instruction booklet accompanying the videotape suggests three possible ways to watch the shots Smith hits. These ways range from casual observation to employing a visualization-like approach, called "Advanced NeuroMuscular Training" by the SyberVision people, to more deeply internalize the movements.[21]

The DeVore brothers, in their *Muscle Memory Programming for Every Sport*, say that viewing such a videotape helps "stimulate and bring to the surface for easy access the memory of fundamental skills already stored in your brain." [22] The SyberVision system, they continue, "is based

on the assumption that if you can perform the fundamentals of your sport correctly a minimum of five times out of 100 attempts, then it is possible for a high level of consistent performance to become a reality for you.”[23] Add the DeVores:

Every time you practice your sport you are working from previously-stored muscle memory. If you can produce a desirable motion at the five percent level of consistency, then a muscle memory blueprint, or an electronically-encoded pattern of that movement, is dispersed throughout memory in your brain.[24]

Basically, what the DeVores have done is systematize a way to generate a phenomenon most of us have occasionally experienced. If you are a tennis player, for instance, and are watching the finals of Wimbledon or some other major tournament, you might feel a strong urge to go out to the courts and play. If you accede to this urge, you will probably find yourself playing better and more inspired than usual, because the outstanding stroke-making of the players you just saw on TV or in person has stimulated your muscle memory and subconscious, bringing your good performance potential to the surface. The SyberVision videotapes allow you to experience this phenomenon as needed, not just whenever you happen to witness your sport being well-played.

Placing the SyberVision System in Perspective

Dick Gould, varsity men’s tennis team coach at Stanford University, allowed Steven DeVore in 1978 to devise for his players a customized program based on the muscle memory concept. We note in the Spring, 1986 SyberVision catalog what was done along these lines:

Each player’s strokes are recorded on film and then analyzed for biomechanical correctness. The film is edited so that only the perfect strokes remain. The edited film is then duplicated; the perfect strokes are reproduced hundreds of times. Watching these tapes forms the core of the players’ neuro-muscular training.

After this statement the SyberVision catalog writer went on a self-congratulation spree, saying among other things: “The results of the training speak for themselves. The Stanford Men’s Tennis Team won *two* national championships.” [These refer to titles won in 1980 and 1981.] “. . . Even a great tennis team like Stanford can be a better team. And even a great coach like Dick Gould can change his tune. Listen to him now: ‘SyberVision was a strong factor in our national championship seasons... The program has the potential to help create a superior tennis player.’”

When the SyberVision catalog writer said, “Listen to him (Coach Gould) now,” I decided to take him up on his suggestion. I wrote to Coach Gould, with “now” at the time being June 14, 1986. The Stanford men’s tennis team coach kindly returned my cover letter along with a brief questionnaire I had sent him, making comments on each. Coach Gould, in referring to the players’ strokes being recorded on film and then edited to produce a SyberVision training tape, said “this was done part of one year”—an indication that the SyberVision people might have been overreaching themselves in taking substantial credit for a second year’s (1981) national championship. This assumption gained additional credence when Gould observed that during the 1980-81 time period “the (Stanford) women’s (tennis) team also used SyberVision and had one of their lowest finishes ever.” This interesting fact, of course, has never made it into any SyberVision catalog.

In my cover letter I made this remark: “Since mental training advocates often exaggerate the effectiveness of their preferred technique, it is important to verify claims so athletes are not misled.” Next to this remark Coach Gould wrote, “True.” I then informed him that “I have obtained the Stan Smith SyberVision videotape, and consider it quite good,” to which he concurred, writing, “It is!”

The questionnaire I sent contained statements for Coach Could to respond to. The questionnaire appears on the following page.

(Questionnaire About SyberVision Sent to Coach Gould)

Please check all statements that apply.

1. During the 1986 season my players watched SyberVision's Stan Smith videotape:

A. Occasionally.

B. About once a week.

C. Before most matches against other schools.

D. Other

2. During the 1986 season personalized SyberVision-like videotapes were made of my top varsity players:

A. Occasionally.

B. About once a week.

C. Before most matches against other schools.

D. Other

3. My players no longer watch SyberVision system videotapes.

Comments/Amplification (if you wish to make any)

Thanks!

On Statement #1—"During the 1986 season my players watched Sybervision's Stan Smith videotape"—Coach Gould checked answer "A. Occasionally," and wrote next to it: "Only certain players on specific stroke production (more for fundamentals than anything else)." Statement #2—"During the 1986 season personalized SyberVision-like videotapes were made of my top varsity players. My players watched these personalized videotapes"—saw Coach Gould choosing answer "D. Other," writing "None" in the blank. Statement #3 he did not check (since the "Occasionally" answer to Statement #1 applied). Finally, in the Comments/Amplification section the Stanford men's tennis team coach wrote, "I think the concept is good and the Smith tape excellent on most strokes. However, how can you tangibly measure results after working with SyberVision—it is not all things to all people. P.S. I like and respect Steve DeVore a great deal!"

What we have here in Coach Gould's 1986 remarks is clearly a mixed bag. When he says, among other things, SyberVision "is not all things to all people," that hardly constitutes an unqualified endorsement of the approach. Certainly, if the SyberVision system had been instrumental in the Stanford men's tennis team winning the national championship in 1980 and 1981, as the company's catalog implied, Gould would have continued having SyberVision-like videotapes made of his top players. This was not done. Instead, during the 1986 season only some of his players occasionally watched the Stan Smith videotape ("more for fundamentals than anything else," pointed out Gould). It is necessary to note that Stanford won the NCAA men's tennis team title again in 1986—this apparently occurring without the Sybervision system playing much of a role. It seems that one must cite more telling factors—i.e., the players' superior talent, combined with good coaching—to account for Stanford's 1986 tennis championship.

After pondering Coach Gould's remarks, I wrote to SyberVision. I sent them a copy of the comments and answers Gould supplied me, and suggested that they drop all references to the Stanford men's tennis team and its coach in their Stan Smith videotape ad, because the 1986 ("now") statements of Coach Gould about SyberVision conflicted with the impressions generated by the ad. This suggestion was not adopted, and through mid-1990 the ad, with its Stanford men's tennis team reference, continued to run.

The point of this story is not to put down the SyberVision system—an approach I think contains a lot of merit. Rather, I have merely desired to demonstrate again how important it is for you to check into claims made by mental training advocates, especially those touting their expertise or a product. Ask the hard questions. Be open-minded, but not blind; meaning, do not take all the great things you hear about mental rehearsal techniques at face value. Realize that no mental training strategy is infallible, and that each approach's proponents do not eagerly admit their failures. By insisting upon receiving the total picture as to what a particular mental training strategy can and cannot do for you, followed by some verification efforts on your part, you will develop realistic expectations—expectations that will permit you to continue practicing the mental discipline of your choice whenever rough waters are encountered. Otherwise, possessing an overoptimistic assessment of what self-hypnosis, visualization, subliminal tapes, and other self-programming aids offer might lead you to give up on mental training completely after some setback, something your opponents will gladly welcome.

Subliminal Videotapes

Developers and marketers of subliminal audio tapes are now coming out with subliminal videotapes. The subliminal messages presented on such tapes are reputedly doubly effective because one's subconscious is hearing *and seeing* the positive statements. General subject matter subliminal videotapes are predominately available, though a few perceptive companies offer sports-specific subliminal videotapes as well.

A typical general subliminal videotape is one called "Reflections," marketed by the Institute of

Human Development.[25] In ordering this tape one can choose from several different categories, such as "Stop Smoking" and "Wealth and Prosperity." I obtained the "Reflections" subliminal videotape dealing with "Self Image, Self-Confidence," because this mind-set is such an important one for athletes to possess. This tape, as are SyberVision's, turns out to be well-produced, comes in Hi-Fi stereo, and lasts for 30 minutes. Lovely nature scenes (desert sunrises, forest meadows, etc.) combine with pleasant background music and nature sounds to guide the viewer into a calm and relaxed state. The subliminal audio messages are well-masked because neither I nor others who watched the tape with me, despite diligent efforts, heard any words. However, when employing a VCR possessing a good Stop Frame function, one can see phrases—in this tape's case, such phrases as "I am confident" and "I believe in myself." (The subliminal statements appearing on the "Reflections" videotape are printed on the tape's container cover.)

Dick Sutphen's Valley of the Sun Publishing company offers videotapes which combine subliminal messages with hypnotic visual effects and spoken suggestions. Sutphen claims in his company's catalogs that his "Video Hypnosis" tapes, with their incorporation of multiple subconscious programming methods, are at least four times more effective than the "surf or clouds" subliminal videotapes promoted by others. Having viewed on several occasions the "Incredible Self-Confidence Video Hypnosis" tape—a tape whose topic is of inherent interest to athletes—Sutphen's contention deserves respect. Certain athletes no doubt could well profit from watching "Incredible Self-Confidence," for the tape, in my opinion, is most extraordinary. The visual effects are spellbinding, while Sutphen's suggestions are strong, if not heavy-handed. Athletes I have shown the tape to either like it very much, or hate it (no one seems to take a middle ground after seeing it). To see how the tape affects you and your athletic performance, check it out; for there is no other way to find out. (Tennis players may wish to examine Sutphen's "Tennis Programming" videotape.)

It hardly interests me, though, whether one kind of subliminal videotape proves superior to another because in general I find mental training videotapes: 1) inconvenient to use (one must have access to a VCR and TV, resulting in especially difficult logistics for out-of-town competitions); and 2) inflexible in nature (the athlete's needs constantly change, while the tape's message never does). So, I encourage the athletes I help out to learn and regularly practice self-hypnosis, a supremely powerful and versatile mental training strategy, whose only cost is a little of the user's time.

Final Word on Mental Training Videotapes

For the future one can expect expanded use of subliminal and SyberVision-like videotapes, as new products in this area continue to hit the marketplace, a reflection of consumer interest and demand. It is also easy to envision a separate mental training videotape for most sports eventually becoming available, which might prove particularly helpful to the U.S. Olympic sports program. How rapidly this comes about remains to be seen, of course. But certainly, by the 21st Century videotapes and other visual mediums (such as optical discs possessing an interactive feature) will be much more widely utilized for mental training purposes, perhaps supplanting mental training audio tapes in popularity.

Mental Training Strategies: Extent of Use by Athletes

Throughout this book an attempt has been made to determine how extensive is the use of mental training strategies by athletes. Robin Finn, reporter for the *New York Times*, presented in a 1989 article an optimistic, though vague, estimate of the degree to which these strategies have been adopted. Claimed Finn:

. . . Only recently have large numbers of athletes abandoned the idea that obtaining psychological help is an admission of weakness.

Therapists who specialize in treating athletes are finding a growing demand from high schools, colleges, Olympic teams and professional sports franchises concerned with keeping million-dollar stars healthy in mind and body.

Sports psychology is fast becoming as familiar in training regimens as weightlifting, wind sprints, and sit-ups.[26]

Finn did not quantify the “large numbers of athletes” who think more favorably nowadays of psychological assistance, nor explain how great the “growing demand” has been for therapists who help athletes. The reporter did, however, note a survey conducted by the Institute of Sports Psychology, in which “fifty percent of the college coaches questioned by the institute indicated that they had consulted a sports psychologist.”[27] It is, of course, one thing for a coach to consult a sports psychologist, and quite another for the coach to incorporate into his program the recommendations or services of the sports psychologist.

Despite the imprecise nature of Finn’s assertions, their basic thrust appears accurate: elite level athletes are using and being exposed to mental training strategies to a much greater degree than their counterparts were 10 years ago. Finn provides interesting anecdotal evidence of this trend. The *Times* correspondent points out that, as of 1989, Dr. Frank Gardner served as a psychologist for the New York Knicks and New York Rangers, aiding the players with their mental conditioning. The Boston Bruins also employed in 1988 the services of a psychologist (not identified by Finn), who created special videotapes to help the team defeat the Montreal Canadiens for the first time ever in the Stanley Cup playoffs. Finn mentions as well that Dr. Allan Lans has acted as “a psychiatrist on the New York Mets staff,” mediating “disputes between players.”[28] Whether Dr. Lans assisted any of the Mets players in their mental preparation for games, Finn does not indicate; however, the reporter does describe several other instances of sports psychologists working with athletes.

That many professional sports *teams* currently use the services of sports psychologists can be considered a fairly recent development; it’s something which was really not in evidence prior to the mid-1980s. This is why one can comfortably claim that more athletes than ever regularly practice mental training strategies, though the exact percentage (no doubt still small) will perhaps forever remain a mystery.

* CONCLUSION *

The six words to riches are: “Find a need and fill it.” Similarly, the six words to athletic success are: “Find your weakness and correct it!” You are only as good as your weakest point, and the weakest point for most athletes is their mental conditioning. They either do not know how to or will not make an effort to properly prepare themselves mentally. As a result, many athletes regularly lose their confidence and concentration during competition; their mental lapses, which lead to poor performances, make the days, weeks, months, and years spent on physical conditioning and sports technique a big waste of time.

In this book I have described at length various mental training strategies which can improve your attitude, self-confidence, and concentration for both competition and workouts. These strategies, most of which cost you little or nothing to practice, are generally easy to learn and implement, and are something you can do on your own to maximize your full athletic potential. Many effective mental rehearsal techniques have been presented for you to try, from the uncomplicated method of visualization used by Jack Nicklaus to the more involved art of zen, as mastered by

Eugen Herrigel. We have seen how self-hypnosis, visualization, meditation, and other methods of “relaxation” have worked wonders for numerous sports champions and regular athletes alike. It is up to you, now, to make these techniques work for you; and, as a quick glance at the Mental Training Strategies Time Lines reveals, you will join excellent company when you proceed.

The old veteran athlete’s advice to the rookie, which can be summed up by this phrase—*Half way, half ass*—applies here. If you make only a half-hearted effort to master a particular mental discipline, or end up becoming only an infrequent practitioner of the discipline, an annoying inconsistency will probably characterize your subsequent athletic performances; and, achieving your full athletic potential will likely remain beyond your grasp. Disappointment, the usual reward for timidity and lack of resolve, shortly appears, as the natural by-product.

Two major things are required for you to act upon the information unfurled throughout these pages—**Knowledge** and **Will**. One does not will to do something about which he is ignorant, and so knowledge is necessary for action. One also does not do something even if he knows about it unless he possesses the will to do it. So, will or intention is also necessary for action to occur. First knowledge, then will, and finally action follow one after another:

Knowledge + Will ==> Action

The contents of this book, if you have absorbed them, constitute the knowledge element. But, you yourself have to supply the will. The athletes appearing in this book found the will to try out and incorporate mental disciplines into their training regimens, and many of them soon found themselves winning championships, setting PRs, breaking records, and gaining a lot of satisfaction as a result. You, too, by summoning up your will, can do the same. Should you hesitate in pursuing your investigation of mental training strategies, keep in mind the observation of Benjamin Disraeli, the great 19th-Century British Prime Minister: “**The youth who does not look up will look down; and the spirit that does not soar is destined perhaps to grovel.**”

FOOTNOTES

1. “Mental Attitude Is Athlete’s Equalizer,” *Los Angeles Times*, June 15, 1979, Part III, p. 7.
2. Stan Hochman, “Baseball Teams Consider Hiring Psychologists,” *Santa Ana Register*, April 20, 1983, Part D, p. 9.
3. Ibid.
4. Ibid.
5. Ibid.
6. “Thrift ‘Sees’ a Sure Thing for Pirates’ Hitters,” *The Sporting News*, February 3, 1986, p. 7.
7. Reliever Doug Corbett discussed how imagery, as taught to him by Dr. Ravizza, helped him attain a superb 1.59 earned run average early in the ’86 season (see “Corbett Wins by Waiting Out the Fates,” *Los Angeles Times*, May 9, 1986). Stated Corbett in part: “In the past, I’ve pitched five minutes on the side every day to stay sharp. Now, I can do the pitching in my mind and save a lot of physical wear and tear... I’ve developed this sort of tunnel vision when I’m out there. Everything is blocked out, all my energy is focused on my job.”
8. Richard Hoffer, “House Calls,” *Los Angeles Times*, July 5, 1989, Part III, p. 1.
9. Mark Teich and Pamela Weintraub, “Ultra Sports,” *Omni*, August, 1985, p. 100.
10. Ibid.
11. Ibid.

12. The reader may refer to Eldon Taylor's *Subliminal Consciousness: Emperor's Clothes or Panacea?* (published in 1986 by: Just Another Reality, Box 7116, Salt Lake City, Utah 84107) for a listing of companies engaged in supplying subliminal tapes and related products. Taylor's discussion of the effectiveness of subliminal tapes is also instructive.
13. Psychodynamics Research Institute presents in its catalog the testimonial of an unnamed NFL training coach, who stated, "I gave your Athletic Abilities tape to our quarterback... (and) he played the best game of his career the next week." With both the coach and quarterback remaining unidentified, such a vague story carries little impact, though it does possess some value as filler.
14. For more information on the subliminal sports tapes described, contact: Psychodynamics Research Institute, P.O. Box 875, Zephyr Cove, Nevada 89448; Mind Communication, Inc., P.O. Box 9347, Grand Rapids, MI 49509.
15. An informative catalog featuring self-help/New Age audio and videotapes, books, etc. is available from: Valley of the Sun Publishing, Box 3004, Agoura Hills, California 91301.
16. Dick Sutphen, "The Shortcut to Skill in the Martial Arts," *Black Belt*, March, 1979, pp. 30-35. This article also contains pictures of hypnotized martial arts students, among other unique items of interest.
17. Ibid.
18. Yogi Wassan, *Secrets of the Himalaya Mountain Masters*, (Mokelumne Hill, California: Health Research, 1973; originally published in 1927, Punjab, India), p. 72.
19. For a catalog describing their Holographic Music offerings, contact: Conscious Living Foundation, P.O. Box 9, Drain, Oregon 97435.
20. For additional information on SyberVision's videotapes contact: SyberVision Systems, Inc., Fountain Square, 6066 Civic Terrace Avenue, Newark, California 94560.
21. One thing I once did while viewing the Stan Smith videotape is worth considering. I turned off the videotape's sound, and then played on my stereo system PRI's Tennis subliminal tape. So, I was both watching Smith hit perfect shots and hearing a subliminal message; the music on the subliminal tape fit in well with the action on the videotape. Trying such a combination never hurts because even if only one of the two mental training strategies works, the athlete still comes out ahead.
22. Steven DeVore and Greggory R. DeVore, *Muscle Memory Programming for Every Sport*, (1981, publisher not listed, but the book is obtainable from SyberVision Systems, Inc.—see footnote #19), p. 9.
23. Ibid., p. 11.
24. Ibid.
25. For a catalog on this company's self-help products, write to: Institute of Human Development, P.O. Box 1616, Ojai, California 93023.
26. Robin Finn, "Resistance to Sports Psychologists Is Shrinking," *Orange County Register*, June 21, 1989, p. D13. An interesting example of this "no big deal" attitude about discussing one's use of mental disciplines can be seen in the experience of Michelle Finn, who won the women's 100 meters in the 1990 TAC National Track & Field Championships. Shortly after her victorious race, Finn informed the press, "I've been on my own for awhile with no coach, so I really appreciate this win because I did it myself with no help. . . I visualized this race 20 times in my head since yesterday" (see "Lewis Breezes to 100-meter Victory," *Orange County Register*, June 16, 1990, p. D17). One also notices in this case that the athlete (Finn) performed a heavy dose of visualization in the 24-hour period leading up to the race, a good thing for one to do no matter what his sport.
27. Ibid.
28. Ibid.

APPENDIX I

A COACH'S PERSPECTIVE ON MENTAL TRAINING

Dick Wolfe, 4-time national gymnastics Coach of the Year, has been head coach of the men's gymnastic team at California State University, Fullerton since 1968. His teams have won three national collegiate championships. Coach Wolfe incorporates mental training into his gymnastics program, utilizing the expertise of Dr. Ken Ravizza, whose mental training work with athletes is detailed in the Recent Developments in Sports Psychology and Mental Training chapter.

How a coach views a mental training program will probably differ from how the involved athlete or sports psychologist views it. It is instructive, therefore, to study the viewpoint of a veteran coach such as Dick Wolfe who, with all his success in the gymnastics world, would not initiate and retain a mental training program unless he was certain of the benefits such training confers upon his athletes. I interviewed Coach Wolfe on April 23, 1986. After the interview, which follows, I offer some general observations.

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Stevenson: How many years has Dr. Ken Ravizza helped your gymnasts with their mental training?

Coach Wolfe: For six years. When I first talked to Ken in 1980, I had already watched him work with the women's gymnastics team for two years. He was very suspect to me. It wasn't that I didn't believe in mental training, but I was a typical coach: I didn't want anyone coming into "my domain" and messing with my success. So, I met with him two days a week, about an hour each time, for several weeks. I questioned him, challenged him—I'm sure I was very hard on him. I would question his integrity, what his motivation was, what his actual reasons for working with young people were: was it his ego? He wasn't threatened by my questioning, and I was very impressed with him. I discovered that philosophically and humanistically, Ken and I are on track, and I wanted to make sure of that at first.

The next step then was approaching the team. I told them how much time I had personally spent with Ken Ravizza, and I let them know that I trusted him. I wanted them to take some time to hear his spiel, and then behind Ken's back we would discuss whether or not we wanted him to become involved in the gymnastics program.

Stevenson: What was his presentation about?

Wolfe: He talked about the mental aspect of competition, that it was something which could be taught, learned, and practiced, just like the basic skills we practice. He also found out that a lot of my more successful guys were already doing imagery, applying relaxation techniques. So, almost without realizing it, we were already carrying out a mental training program, but not in a formal way.

Stevenson: What was the team's verdict after hearing Dr. Ravizza's presentation?

Wolfe: They wanted to try it (the mental training program). In the beginning they felt strange. Nowadays, I think if you introduce such a program, it's acceptable. It's an accepted part of sports. Pros do it, and everybody knows it. Mental training is in the media. Six years ago, in 1980, that was not true. So, the guys openly admitted later that they felt real uncomfortable lying on their back in a dark room, with Ken walking around in his socks trying to put them in a relaxed state. There was a lot of nervous giggling at first, guys lifting their heads to see what was going on with other people. A couple of kids never really trusted the approach and did not give of themselves to the approach. The second season, because we were successful gymnastically, we had a lot of kids

return; the new kids came in and they were a little cautious when they started. But, now we are at a point when new people come in, they are ready to go and they accept the mental training program because it has been successful.

Stevenson: Obviously, Dr. Ravizza conducts group sessions. Does he also work with individual gymnasts?

Wolfe: Yes.

Stevenson: I assume this is a voluntary type of thing. If someone feels they need help, or additional help, they can give Ken a call and meet with him.

Wolfe: Yes. As a matter of fact, he probably spends too many hours in terms of what is fair on an individual basis.

As a coach, I don't see what Ken does and what I do as being in two different areas. This is just my philosophy. I sit in on all the meetings that he has with the team—not with the individuals, because sometimes that is none of my business—but I sit in when he has a session, when he shows slides. I don't assume that I already know what Ken is talking about. I take notes, think about what he says, and continue to challenge what he is doing. This is because I am very opposed to a canned mental training program. I feel it should be very dynamic.

Stevenson: Does a situation ever arise where you see an athlete not performing up to his ability, and you suggest to the athlete, "Why don't you visit Ken Ravizza?" Or is it something that the athlete figures out on his own?

Wolfe: It's both.

Stevenson: I assume you do not strong arm the athlete and really insist that he see Dr. Ravizza. You may prod him, though. You can see the gray area I'm getting into.

Wolfe: Oh yes. In fact, sometimes Ken and I have a problem that way. It's like you make a kid work on his basics. Yeah, I might make a kid go see Ken. You can't really make anybody do anything, but there can be consequences if the athlete doesn't do what you ask him to do. So, you do have a degree of control over him. The philosophy is that it's a voluntary type of program. But, in reality, I get mad if the athlete is late and does not give Ken his full attention. A lot of times Ken's attitude is that "if they want to do mental training, they'll do it, and if they don't, they won't." But, as a coach, I have a responsibility to help my athletes behave in ways that will make them successful. The basic assumption is that they want to succeed. So, if they do not listen to Ken, come late, or miss a mental training session, then I'm going to be upset.

Stevenson: Tell me about the mental training tapes Dr. Ravizza has made for your team.

Wolfe: We use one tape when Ken cannot be with us personally. It's his voice on the tape, and he talks to the team. Sometimes I cannot afford to take Ken along on an away meet, or he is busy doing other things and cannot spare the time. So, instead of taking Ken, we take the tape. For the home meets, Ken is always here.

Stevenson: In the week preceding a big meet, how many times during that week do your gymnasts listen to the tape, or engage in mental training sessions with Dr. Ravizza?

Wolfe: In terms of how we use the tape, with the exception of a relaxation tape, we listen to it immediately prior to the contest at 5 o'clock, with the meet beginning at 7:30. 5 o'clock to 5:30 is mental training; 5:30 to 5:50 is stretching on the mat as a group; 5:50 to 5:55 is a briefing by me. From that time until 7:20 is open warm-up. So, it's a long preparatory process.

Stevenson: What is on this general mental training tape?

Wolfe: The first instructions get the athlete into a relaxed state. Then, Ken puts them into a

“mental room”—they do down some stairs into their “mental room,” which they’ve learned to create. The “mental room” is their safe place. That is where they can go and nothing can get to them or bother them. That’s where they go figure their strategy. In the “mental room” Ken helps them set some goals; he’ll say, “Go to your blackboard and write your goals for the meet.” Then, there are some affirmations. Like, “I am a strong and powerful gymnast,” and you say this six times. Or, “I am ready;” “I am prepared to focus on the meet;” “I’m committed to taking one trip at a time.”

Stevenson: After the affirmations Dr. Ravizza no doubt brings the athletes out of the relaxed state.

Wolfe: Yes. They come back up the stairs. Once the tape is over, the whole team gets in a circle, and we make a big, loud yell, which starts with everyone bent over, shoulder to shoulder; it’s a team unity thing. At that point in time I’ll talk to them [give the briefing]. Then, down on the floor, I’ve seen Ken do some very remarkable things.

Stevenson: Dr. Ravizza told me about his work with the 1984 U.S. Olympic field hockey team, and how during competition some of the players looked at focal points to help maintain their confidence and concentration. Do your gymnasts use focal points?

Wolfe: Yes, we use focal points. But, you also have a problem with the responsibility of the athlete. For example, you may have a kid who is not using focal points, and you have taught him to use focal points, and you assume that he is using them. You’ve been coaching him for two god-damn years to use focal points, and ask him after the meet, “What was your focal point?” and he says, “Well, I didn’t have one.” “What do you mean you didn’t have one?” and he says, “Well, I don’t use focal points.” These kinds of things can happen when you are dealing with a group of people—and I’m not dealing with that many people, maybe 14 or 15.

One of things that I strive for is for the athlete to be responsible. So, when an athlete misses and then I ask him “What happened?” and he replies “I don’t know,” then we have a problem. He has to sit down and figure out what happened, and take responsibility for his miss and learn from it. That’s my goal, and Ken and I are right on track with that.

Stevenson: How helpful has the “Gymnastics Meet Feedback” sheet been? (This sheet asks the gymnast questions about his psychological state before and during the meet, how he handled stress, etc., and is filled out after the competition. It is presented in the Recent Developments in Sports Psychology and Mental Training chapter.)

Wolfe: Very helpful. It’s important that the athletes be honest with their comments. So, I try not to judge what they say on the sheet. You want them to put down what is real, honest—and sometimes you’re not going to like it. Sometimes a kid might write that he didn’t care; he just wanted to get done and get out of there.

Stevenson: On a scale of 0% to 100%, what percent would you ascribe to mental training and what percent to physical training in helping one learn gymnastics?

Wolfe: I believe the best physical training is concomitant with the best mental training. If a kid is working on a skill which he is physically capable of learning, and possesses the right mental set, he’ll acquire that skill. If he has the wrong mental set, he is not going to learn that skill. I used to say that in gymnastics mental training is 2%, physical training 98%, and without the 2% the physical training doesn’t matter. But, I think I’ve evolved to the point where I cannot separate the mental training from the physical training, because they are both critical to the total process.

Take imagery, for example. You can develop good imagery skills. But, if I tell you, “I want you to lie down and image a Reverse Hecht,” you don’t know what the hell I’m talking about. You don’t even know what event it’s on, right?

Stevenson: I sure don't.

Wolfe: It's a skill on the high bar. So, I have a responsibility to help you, if I were coaching you, to get a picture of what a Reverse Hecht is before you use imagery to help you learn that skill. So again, we got the physical training and mental training overlapping.

Stevenson: Discuss spillover effects, if any. Your gymnasts have learned imagery and other mental techniques, using them for their meets. How about for the classroom? Have you seen an improvement in grades?

Wolfe: Oh yes. And whenever a guy says he's got a physics test which he is nervous about, I ask him, "Did you prepare?" He'll say, "Yeah, I really studied and feel I know the material, but I'm really nervous." So, I tell him, "Remember your breathing," and to apply his mental training skills. I try to suggest to the athletes that they use their mental training skills outside of the context of gymnastics—in the classroom, in social and family situations. Ken and I are always excited to get feedback from former athletes who say that they used their mental training skills in business and careers. Without exception they tell us that they do use what they learned in the mental training program in their after-college life.

Stevenson: Dr. Unestahl says that it would be better for a coach to learn mental training and present it to his team than for a sports psychologist to try to learn gymnastics, for example.

Wolfe: That's very true. You know, Ken is very good at what he does for us because he understands the sport. One of the things that Ken is able to do really well on the floor with our team is nothing.

Stevenson: Nothing. What do you mean by that?

Wolfe: There are times when you should do nothing, and there are times when you should do something. And if you do not have the ability to recognize those two things, then you don't belong on the floor with the team. We took Ken to a very important competition a couple of years ago. During the meet I asked my captain, "How's it going?" and he said, "Fine, I'm really glad we brought Ken." "What did he do?" and my captain answered, "Nothing." I found out later that all Ken did was check in with him, and my captain had the best meet of his life. It was Ken's presence that was important, and that is what my guy was saying.

Stevenson: Do you think that you could assume the role of sports psychologist in the event that Dr. Ravizza moved to another college, let's say? Do you think you could take over what he is currently doing with your gymnasts?

Wolfe: I think it would be difficult for me to step into that role. I think I'm just as good as anybody in terms of behavior and motivational types of things, and so on. But, in terms of putting on the hat of sports psychologist, I don't think so.

Ken acts as mediator, also. If I'm having a problem with an athlete—a communication problem you can call it for lack of other words—I can be very destructive. I'm a very powerful guy with a young person: I got my gray hair, my experience, my accolades, all that, and I can ice the guy if I choose to. I'm in a powerful position, and sometimes the athlete is in a powerful position because I need him. So, you can get very destructive to each other. If I see that situation developing—if I'm frustrated in how I'm dealing with the kid, frustrated with how he's behaving, how he's treating me, and how he's responding to my coaching—what I do is set up a meeting between the kid and me, with Ken acting as the mediator. Ken is very good in this role because he doesn't have anything at stake. I got something at stake, and so does the kid. So, we do a "5 and 5."

Stevenson: What's that?

Wolfe: You put a timer on. Let's say it's you and me. You have five minutes, can say whatever you want, and there's no rules at all. You can call me a (expletive) and use any kind of language

you want. It's a real deal. There's nobody there but the three of us. I can take notes, but I can't respond. Then, after you get done, I have my five minutes. What Ken does is force the athlete and me to talk to each other, look at each other, listen to each other. Like, if the athlete says, "That makes me so mad!" then Ken may say, "Turn and tell the coach 'You make me so mad.' Isn't that what you really mean?" And so on back and forth. The purpose of this mediation session, from my perspective, is that when we are done, there are no walls. There is now a genuine opportunity to communicate, to go into the gym and experience a better learning process.

Stevenson: I gather that quite often you and the athlete do not walk out of the room buddy buddies, but nonetheless you had the communication, which had not been existing before.

Wolfe: That's right. In every case that I can think of where it's happened, there has been such a change in the performance level for the best that it's profound. I once had a pommel horse kid that could not hit it at all. He was scoring 7s. We had an encounter—we set aside 15 minutes, and ended up coming out of the room 1 1/2 hours later; he and I were screaming at each other and everything else. He went his way and I went mine. When he came into the gym the next day, he was scoring 9.7s and 9.8s. Of course, that was his physical ability. But, the two of us had built up walls to the extent that he couldn't function, and I wasn't functioning properly as a coach with regard to his performance. Encounter sessions are not something we use all the time, but I firmly believe in communicating with the people I work with, and if there are walls, you cannot communicate.

Stevenson: Well, Dr. Ravizza says his role should not be that of a fireman, to put out fires. But certainly, fires do arise occasionally, and holding a mediation session is one way to handle them. Is there anything else you would like to mention about Dr. Ravizza and his mental training program?

Wolfe: Ken has added another dimension to me as a coach, and I'm very grateful for that. I suspect that if I had tried to explore mental training with some other sports psychology type of person, it might not have worked. I feel real fortunate that Ken and I have had the kind of communication that we've had. I believe that I have learned a great deal from Ken, and that he's learned a lot from me. The reason it's worked out is because we have the same things in mind: we're both after the truth and a successful performance for the athlete.

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We have witnessed throughout this book many different arguments in favor of making mental training programs voluntary. I made the point in the Swimming chapter that the athlete should be **exposed** to mental training, but not "hassled or pressured" into using mental rehearsal techniques (such as focal points). I also stated that if a mental training program is well presented, its benefits explained and clearly demonstrated to the athlete, then the athlete will probably voluntarily go along with such a program. A problem arises, however, when a coach makes mental training an integral part of his overall program, and the athlete would just as soon have nothing to do with imagery and the like. Coach Wolfe believes that his responsibility as a coach is to see to it that his gymnasts participate whole-heartedly in Dr. Ravizza's mental training program, because in Wolfe's opinion mental training definitely benefits the person. This position, of course, clashes with the individual athlete who might disagree. So, the question becomes: should the authority of the coach or the free will of the athlete prevail? Dr. Ravizza, according to Coach Wolfe, is more inclined to let the athlete do as he wishes regarding the mental training. Coach Wolfe, by contrast, sees difficulties in this tolerant position. If the athletes are allowed to choose whether or not to participate in the mental training program, and some exercise their option to forego it, then you could have half the team doing one thing, and half something else. Team unity and cohesion perhaps suffer as a result. "Do I have one team, or two?" Coach Wolfe might ask himself, were he

confronted with such a situation. He avoids having to deal with this possibility, however, by making "a kid go see Ken" if necessary, and dispensing "consequences" on those who "do not listen to Ken, come late, or miss a mental training session." In other words, Coach Wolfe makes participation in the mental training program mandatory or semi-voluntary. That's the reality. The athlete, keep in mind, never loses his free will: he can always go to another college where mental training is not part of the gymnastics program. But, apparently, no one is scared away from Coach Wolfe due his embracement of mental training; as he states, "when the new people come in, they're ready to go and they accept the mental training program because it has been successful" and because "it's an acceptable part of sports."

When the gymnasts are listening before a meet to the mental training tape, and are in their "mental room," affirmations are either presented by Dr. Ravizza or the athlete creates and repeats his own. Because the athlete is in a highly relaxed state at this time, these affirmations can also be called autosuggestions or hypnotic suggestions, depending on whether it is the athlete or Dr. Ravizza saying them. Again, nowadays the trend is to call mental rehearsal techniques by any name, so long as "hypnosis" is not used.

Coach Wolfe states that it would be difficult for him to step into the role of sports psychologist should Dr. Ravizza's services become unavailable for any reason. In the future necessity may force Coach Wolfe to either take that difficult step or to drop the mental training from his gymnastics program. We have seen many examples in this book of people conducting mental training suddenly changing jobs and/or becoming unavailable to the athlete at critical moments. With the departure or unavailability of the mental trainer came the dissolution or nonoccurrence of the mental training program or session; this generally had a negative impact on the athlete and overall sports program. To insure against this unwelcome development at the collegiate level, athletic departments should create a position for a full-time sports psychologist. If the sports psychologist moves to another college, retires, or whatever, still the *position* remains, and another sports psychologist can be hired to fill it. Professional teams should make similar provision. It should be recognized that the hired "mental training coach" may not always meet expectations. In such a case, management should do what it does with head coaches who fail to deliver: bring in a replacement (while still retaining the position). If the Cal State Fullerton athletic department, for example, has as a policy the permanence of a sports psychologist position (which it presently does not), and Dr. Ravizza moves on, then another mental training expert would be brought in. Coach Wolfe, therefore, would likely be able to continue to incorporate mental training into his gymnastics program. In the absence of such a policy, the recommendation of Professor Medvedev, Dr. Unestahl, and Dr. Nideffer for coaches to become their own sports psychologists takes on added significance.

No matter how proficient the athlete and coach become in the use of imagery, self-hypnosis, and other mental disciplines, the availability of a sports psychologist still can be valuable. Dr. Ravizza sometimes serves as a mediator whenever Coach Wolfe and a gymnast need to air differences. This is a role few sports psychologists ever fill; usually they just concentrate on teaching mental rehearsal techniques to athletes. However, acting as the impartial third person in encounter meetings between the coach and athlete is clearly a service sports psychologists can offer; they can act in a safety valve capacity so to speak. The "5 and 5" meetings Ravizza deftly mediates between Coach Wolfe and alleged underproductive gymnasts demonstrate that there is a lot more sports psychologists can do than simply lead visualization sessions.

APPENDIX 2

WINNING TENNIS THROUGH SELF-HYPNOSIS

This appendix contains two of the more entertaining stories of tennis players who have achieved success with self-hypnosis (details about additional tennis/self-hypnosis success stories are obtainable from the author).

Andy Jablonski's experience with self-hypnosis is perhaps the most unique of all those appearing in this book. Jablonski actually played matches while in the hypnotic state. He clearly demonstrates this can be the most flexible of strategies—and a devastating one as well. I had originally doubted that playing tennis while in the hypnotic state would prove significantly superior to one's giving himself suggestions before the match and between games. I no longer hold this belief, and await the reports of others who try playing tennis while in the hypnotic state.

Testimonial of ANDY JABLONSKI (Spring, 1977)

Last year I went out for the men's tennis team at Fullerton Junior College. The first few days of practice I played three guys in ladder matches, and lost to them; but, each time I did better (came closer to winning). Without warning I was suddenly cut from the team by Coach Moore, our tennis coach. This upset me greatly, and especially because Moore had promised me he'd keep me.

This bad incident provided me incentive to practice every day and run, so that I could make the team next season and show what my true potential was. I also learned self-hypnosis in mid-December, 1976 from Bob Stevenson. I thought knowing self-hypnosis would be a good way to help me achieve and display my potential.

I went out for the team this year (January, 1977). The very first day of practice I played Gary Keefe, the number five man on the team. This was a ladder match. Coach Moore expected Keefe to thoroughly demolish me.

I had a suspicion I'd be playing Keefe. So, before practice I had hypnotized myself: 1) to "return every serve," 2) to "relax, not worry, and be happy when playing," 3) "watch the ball intently until the point of contact, especially the volley and return of serve," and 4) to "play extremely well, play up to my potential."

So, I played Keefe and beat him 6-0 the first set. I hardly missed a return. In the second set Keefe played much better. It went to the tie-breaker; Keefe tried for winners, and made them, winning the set.

Now, here's where it gets good. Before the match I had also given myself the suggestion to play under the hypnotic state, and immediately incorporate any necessary suggestions. (I told myself to "appear normal to the average person.") Roger Farquhar, Keefe's best friend on the team, walks over between the second and third sets, and tells Keefe to hurry up. Coach Moore wanted to run us, Farquhar says, and have the team practice some doubles next. Keefe replied that he'd be finished in 15 minutes.

I immediately became enraged, and gave myself the suggestion to "**destroy** him!" Keefe was lucky to score 8 points that third set, even though he was playing as well as he had during the tie-breaker, and I beat him, 6-1; that made me number five on the team, to everyone's surprise.

I've played Keefe twice since then, using self-hypnosis both times. He edged me once in three sets, and I beat him in three in the most recent. In this one I came back from being down 2-4 in the tie-breaker in the first set with Keefe serving; I also was down 2-5 in games in the third, and beat him, 7-5. Needless to say, Coach Moore hasn't dropped me from the team this year.

While playing in the hypnotic state, my won-loss record against opponents from other JC tennis teams is 3-1. The one defeat was against a guy from Orange Coast who was just better.

Playing in the hypnotic state seems more helpful than just putting myself under before the match because I can give myself on-the-spot suggestions. I also feel more in control. However, both ways are effective.

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The following story of Tim Kilker's illustrates again how beneficial self-hypnosis can be when it comes to your taking tests and exams in school. While it is nice to be a winner and an achiever out on the tennis courts, it has come to the point where it is indispensable that you be a winner in the classroom. Fierce competition for scarce well-paying jobs has made strong academic performance mandatory. Kilker, by utilizing self-hypnosis, brightened his future in this respect—indeed, he is now a dentist.

Kilker's story also contains one of those all-too-common rude opponent incidents. It is satisfying to read how Tim's suggestion to "hang in there every point, never give up" ultimately paid off.

Testimonial of TIM KILKER (Spring, 1977)

As a student at Fullerton Junior College, I've regularly used self-hypnosis (which I learned from Bob Stevenson on September 10, 1976) in studying for big tests. What I'll do is put myself under hypnosis at home before I study and then before I have to leave for school for the test. The suggestions I usually give myself are: 1) "I will remember and retain everything I read," 2) "I will answer correctly and without hesitation any test question asking about material I've studied," 3) I'll often give myself the suggestion to get an "A", and 4) "be relaxed during the test, and not get uptight."

In my first semester at Fullerton College I received straight A's. In History I scored 3 A's on 3 tests. In Zoology I scored 2 A's and 2 B's on the lecture exams, and 3 A's and 1 B on the lab tests. My other classes didn't give tests. Without self-hypnosis I expect I would have gotten B's in my classes.

This semester—my second semester at Fullerton College—I've continued doing well on tests while using self-hypnosis. So far in American Government we've had one test; I got an A, scoring the second highest grade in the class. This really surprised me. In Zoology so far I've scored an A on a lab test, and a B on a lecture exam. I'm very pleased with these scores because I had heard stories about how hard college was. The tests always go smooth; and, I immediately put down the right answer to questions asking about facts I've studied. I'm now able to go into the hypnotic state in 10 seconds if I want to. Usually, though, I take my time.

I've used self-hypnosis for my tennis as well. I play number three on the men's team at school, and estimate I have won 70% of my matches; this is against stiff competition, and with my using self-hypnosis. There's one match in particular which really stands out.

I played this LA Pierce guy at Pierce [Junior College in Los Angeles]. He was a very good player, and dusted me off 6-2 in the first set. I had given myself hypnotic suggestions for this

match, the most important one being to "hang in there every point, never give up." This is exactly what I did. In the second set I kept playing consistently good while my opponent cooled off some, didn't play as hot as he had first set. The LA Pierce guy still played good, though; but, I kept in there and won the second set, 6-2.

At this point my opponent started getting (expletive) off. Throughout the third set he was cussing and calling me lucky. At 4-4 he tried to intimidate me. Whenever I missed a shot, my opponent taunted, "That takes a lot of coordination" or "Where did you learn to play tennis?"

I had kept my cool the whole time; now I started to throw insults back to him. Like once he told me I was a "shitty player;" and I responded, "Well, if I'm a shitty player, you're even shittier, because you're losing!" Anyway, the guy had three match points on me at 5-4; he thought he had me, and was smiling and laughing at me. But, I hung on, and broke his service.

Now more than ever he started dishing it out. At 6-5 mine I was ahead 2-0 (we played no-add scoring), and hit a winning volley that was in by 1 1/2 feet. My opponent calls it out; when I asked him if he was sure of his call, he defiantly challenged me to do something about it. In my own way I did; I won the next point, making it match point.

At match point the guy hit a passing shot. Somehow I lunged for it and successfully slammed a volley past him for a winner and the match. And with that I shouted, "Yeah! You son of a bitch!" and walked away without shaking hands.



(Karl Pagel photo)

Tennis player Tim Kilkner gave himself hypnotic suggestions at home before important matches. This is what he is doing here—not napping.

SUGGESTED READING

Books

* == highly recommended by author

Bennett, James G. and Pravitz, James E., *The Miracle of Sports Psychology*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1982).

Fowler, Corky and Smith, Christopher, *The Hidden Skier*, (Chicago: Contemporary Books, 1977).

Garfield, Charles A., *Peak Performance: Mental Training Techniques of the World's Greatest Athletes*, (Los Angeles: Jeremy P. Tarcher, Inc., 1984).

* Gauron, Eugene, *Mental Training for Peak Performance*, (Lansing, New York: SportScience Associates, 1984).

Herrigel, Eugen, *Zen in the Art of Archery*, (New York: Pantheon, 1953).

* Kroger, William J., *Clinical and Experimental Hypnosis*, (Philadelphia: J. B. Lippincott Company, 1977).

Maltz, Maxwell, *Psycho-Cybernetics*, (Englewood Cliffs, New Jersey: Prentice-Hall, 1960).

Mitchell, Wilfred M., *The Use of Hypnosis in Athletics*, (Stockton, California: Department of Psychology, University of the Pacific, 1972).

Murphy, Michael and White, Rhea, *The Psychic Side of Sports*, (Reading, Massachusetts: Addison-Wesley, 1978).

Nideffer, Robert M., *Athletes' Guide to Mental Training*, (Champaign, Illinois: Human Kinetics Publishers, Inc., 1985).

Oates, Bob, *The Winner's Edge*, (New York: Mayflower Books, 1980).

Orlick, Terry, *Psyching for Sport*, (Champaign, Illinois: Leisure Press, 1986).

Schubert, Frank, *Psychology from Start to Finish*, (Toronto, Canada: Sport Books Publisher, 1986).

Silva, John M. and Weinberg, Robert S., ed., *Psychological Foundations of Sport*, (Champaign, Illinois: Human Kinetics Publishers, Inc., 1984).

Syer, John and Connolly, Christopher, *Sporting Body Sporting Mind*, (New York: Cambridge University Press, 1984).

Watson, Tom, *Getting Up and Down*, (New York: Random House, 1983).

* Winter, Lloyd B., *Relax & Win: Championship Performance in Whatever You Do*, (San Diego, California: A. S. Barnes, 1981).

* Yessis, Michael and Trubo, Richard, *Secrets of Soviet Sports Fitness & Training*, (New York: William Morrow & Co., Inc., 1987).

Articles

Bell, Marty, "Hypnosis in Sports: How to Slip Into a Trance and Out of a Slump," *Sport*, March, 1984.

* Blumenstein, B. and Hudanov, N., "Psychological Preparation for Competition," *Soviet Sports Review*, Vol. 15, No. 1, March, 1980.

Borzov, Valery, "An Hour Before the Start," *Soviet Sports Review*, Vol. 16, No. 4, December, 1981.

Bricker, Rebecca, "Psychologist Barbara Kolonay Helps Athletes Train Themselves to Overcome the Clutch," *People Weekly*, February 1, 1982.

Goodman, Jonathan, "Athletes Game for Relaxation Tapes," *Los Angeles Times*, November 24, 1983.

Grimley, Steve, "Mind Games: U.S. Slow to Accept Sports Psychology," *Orange County Register*, April 19, 1985.

* Gurov, V. M., Svyadoshch, A. M., and Jampolsky, L. T., "The Suggestive Method for Preparing Athletes for Competition," *Soviet Sports Review*, Vol. 15, No. 2, June, 1980.

Himmelberg, Michele, "Mind Games," *Orange County Register*, August 20, 1985.

* Ho, Eugene H., "Hypnotism in Self-Defense," *Blackbelt*, October, 1973.

Kodzhaspirov, Y. G., "Monotony in Sport and Its Prevention Through Music," *Soviet Sports Review*, Vol. 20, No. 3, September, 1985.

Kopisov, V. S. and Nagorniy, A. D., "The Use of Electrosleep in the Training of Qualified Weightlifters," *Soviet Sports Review*, Vol. 18, No. 4, December, 1983.

Krier, Beth Ann, "Olympians Exercising in Mind Arena," *Los Angeles Times*, June 7, 1983.

Lundgren, Charlie, "Hypnosis in Tennis," *Tennis*, June, 1970.

* Seimuk, A. A., Arkhangorodski, Z. S., and Zaitsev, U. K., "Autogenic Training for High Level Weightlifters when Using Heavy Training Loads," *Soviet Sports Review*, Vol. 18, No. 4, December, 1983.

Shirley, Bill, "The Eastern Bloc Comes Into L.A. With a Head Start," *Los Angeles Times*, January 25, 1984.

* Stevenson, Bob, "Self-Hypnosis for the Athlete," *Hypnosis Quarterly*, Vol. XXI, No. 3, 1978.

* Stevenson, Bob, "Self-Hypnosis for the Athlete (Part II)," *Hypnosis Quarterly*, Vol. XXI, No. 4, 1978.

Stewart, Robert, "Zazen and the Martial Arts," *Blackbelt*, April, 1978.

* Suinn, Richard, "Body Thinking: Psychology for Olympic Champs," *Psychology Today*, July, 1976.

Teich, Mark and Weintraub, Pamela, "Ultra Sports," *Omni*, August, 1985.

Thomas, John, "The Power of Positive Swimming," *Old Oregon*, Winter, 1979.

* Unestahl, Lars-Eric, "New Paths of Sport Learning and Excellence," *Department of Sport Psychology*, Orebro University, Orebro, Sweden, 1981.

ADDENDUM

As if the teachings of this book need further validation, the testimonial of John Zajc is offered to illustrate that all you have to do to learn self-hypnosis is read and then practice the self-hypnosis procedure spelled out in the Introduction chapter. Zajc, the number one player on the Fullerton College varsity tennis team for the 1990-91 season, did this, and realized the usual successes that come from mastery of the technique. Here is what Zajc related in a December 1, 1990 interview.

Bob Stevenson: When did you learn self-hypnosis?

Zajc: I learned self-hypnosis about late October, 1990. I learned the technique by reading copies you gave me of the Introduction and Tennis chapters. I read them twice; the first time was just to get a general idea, and the second time I read them step-by-step, memorizing the instructions. It took me 15 or 20 minutes, and then I tried it out.

Stevenson: Describe a typical self-hypnosis session you engage in.

Zajc: I go to a quiet place in the house, which is the upstairs den. After closing the door I lie down on the couch, and slowly tell myself to relax. I try to get as calm as possible. I stare at a spot on the ceiling, and keep telling myself to "Relax, relax," while taking very deep breaths. It takes me about 5 minutes to get in the hypnotic state.

Stevenson: How do you know you are in the hypnotic state?

Zajc: My heart beats slower and slower, and my body just feels so relaxed. I can almost feel myself going down into something. It's like a sleeplike state.

Stevenson: What suggestions do you give yourself?

Zajc: I give myself five suggestions. The first one is to "Concentrate on every point." This, of course, is for my tennis game. And I repeat it over and over again, probably about five or six times. The next one is to "Hit out on all my shots." The third one is to "Play with a lot of confidence." The fourth is to "Kill, kill the opponent." The last one I tell myself is: "No matter what, you will not be bothered by anything; nothing will disturb you."

Stevenson: Are your eyes closed while you are giving yourself these suggestions?

Zajc: My eyes are closed.

Stevenson: How do you get out of the self-hypnotic state?

Zajc: I just tell myself, "On the count of three, I will awaken and feel great." And basically, I'll come back to normal.

Stevenson: When do you give yourself these suggestions?

Zajc: The night before a big match. I go through the whole routine before going to bed. I use names of my opponents—that's for the "Kill" stage—"kill" whoever I want to beat the next day. Then, a half hour or 45 minutes before the match, I practice self-hypnosis again at home right before I leave. Also, sometimes while driving to the match I'll give myself autosuggestions, just to reinforce them.

Stevenson: Describe how the autosuggestions have affected your tennis play.

Zajc: Recently, for the 1990 Cal Poly Pomona Tennis Championships I was coming off a month-long illness where physically I wasn't there. But, I gave myself autosuggestions throughout the tournament, and my partner and I ended up winning the doubles in the "A" division. Using self-hypnosis for the finals, for instance, I came out to the court in a good frame of mind, good

attitude. I really felt confident, and I played extremely well (we won 7-6, 6-4).

Stevenson: How many points or games per set would you estimate self-hypnosis is worth for you?

Zajc: I would say probably two games per set. The reason being, say it was 4-all; that's the time you need to break serve. The self-hypnosis has made me more mentally tough to come through with that break of serve, and then serve out the set. That's why I say two games. In the past—I don't want to use the word "choke"—but I would not pull through in the tight matches; I tended to lose my composure. Now, with self-hypnosis I'm pulling out the tough ones.

Stevenson: Was it hard to learn self-hypnosis?

Zajc: It was real easy. I just read the procedure over again and practiced it.

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Worthy of mention in this section is the November 26, 1990 announcement by the Los Angeles Dodgers that they have hired a full-time team psychiatrist, Dr. Herndon Harding, Jr. This hiring came only days after the Dodgers acquired star outfielder Darryl Strawberry from the New York Mets, signing him to a 5-year \$20.5 million deal. Strawberry, while with the Mets, had undergone alcohol rehab the previous Spring. This being the case, it only makes sense that the Dodgers would want to obtain some insurance on their \$20.5 million investment. Dr. Harding's role, it should be pointed out, is to assist players at all levels of the Dodger organization, that is, both major and minor leaguers.

Meanwhile, a unique book, *The Mental Game of Baseball* (1989), has made its appearance. Written by Harvey Dorfman, the Oakland A's full-time performance enhancement counselor/instructor since 1984, and Karl Kuehl, the A's Director of Player Development, the book presents detailed advice on how one can become a more mentally tough baseball player. Interestingly, self-hypnosis is not discussed at all by Dorfman and Kuehl. Rather, they recommend the practice of visualization, presenting some good testimonials along the way, such as this excellent one from Hall of Famer Duke Snider:

I did my preparation in the afternoon. I liked to lay down for an hour before I went to the park. That's when I went over the pitchers in my mind. We didn't call it visualizing then, but I sure used my imagination.

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It should be mentioned that there exist ultra powerful mental techniques—techniques far more powerful than those (including self-hypnosis) described in this book. However, these techniques, which exercise one's supersonic powers, are best learnt in an intimate instructional setting involving the master and his eager understudy. Therefore these mental forces, to be fully appreciated, should be investigated only after one has become a self-hypnosis adept. So, get down the basics. As John Zajc did, learn and apply self-hypnosis. Then, continue your search for something "additional," for it exists.

