



MIND OVER MUSCLE™

*PEAK PERFORMANCE
THROUGH BIOFEEDBACK*

*The Applied Sports Psychological
Training Program*



This program was developed by Lawrence Klein, member of the Canadian Ski Coaches Federation, and Ski Instructors' Alliance and Major (Ret) Nory Laderoute, former Athletic Director, Canadian Armed Forces Combat Training Center, former head coach of the Canadian Military Pentathlon Team.

MIND OVER MUSCLE:TM **The training secret of** **world class athletes**



Dr. Jean Louis Etienne was the only person to conquer the North Pole, alone on skis. Training with Mind Over Muscle helped him endure the extreme cold.

C.J. Mueller was the first person to ski over 130 m.p.h. Mind Over Muscle helped his visualization skills, enhancing his performance.





15 Montréal policemen ran 7400km (4,625 miles) in a relay race from Montréal to Los Angeles for the 1984 Olympics. Mind Over Muscle helped build their mental toughness and their endurance.



Captain Steve Tibbets, Canadian Forces, Small Arms Training Director and 1988 Queen's Plate Medal Winner attributed his success to Mind Over Muscle.



The (CIOR) Canadian Forces Military Pentathlon Team used Mind Over Muscle to capture individual gold medals internationally.



Six Japanese women, average age 55, swam the English Channel. Using Mind Over Muscle, they learned to smooth their stroke and endure long periods in the cold water.

The Canadian Women's Downhill Team, with many World Cup wins, uses Mind Over Muscle to sharpen their competitive edge.



Foreword

MIND OVER MUSCLE teaches coaches and athletes the natural method of control based on true values that have stood the test of time. Since 1976 thousands of Olympic, professional, and amateur coaches and athletes have used the GSR2 biofeedback monitor with the MIND OVER MUSCLE peak performance training program. Athletes from every sport - weekend athletes to world record holders - have learned to improve their performance either working alone with the Mind Over Muscle program, or with the assistance of their coaches. If you are in a training program, then we recommend that you work closely with your coach, since he or she is an important link in your athletic development.

Since the beginning of organized Olympic Sport, athletes have improved their performance through a combination of physical and mental training. When Roger Bannister broke the 4-minute mile, not only a physical barrier, but also, and probably more importantly, a psychological barrier fell. Athletes took notice when the East Germans dominated the 1976 Olympics - their secret was the utilization of deep relaxation and visualization techniques.

Applied sports psychological training links eastern thought and western technology. Biofeedback enables athletes like yourself to achieve a deep state of relaxation. The feedback process enables you to harness your mind through concentration. Focusing your mind will enable you to meditate more effectively. By adding visualization to this meditative state, you will enhance your performance.

We wish to acknowledge the hundreds of clinician's coaches and athletes whose valuable input has shaped this program. Special thanks to Dr John Corson of Dartmouth Medical School, Dr. Erik Peper of San Francisco State University, Dr. Sue Wilson of York University, Dr Len Zaichowsky of Boston University, Dr. Cal Botterill of the University of Winnipeg, Dr. Daniel Landers, Arizona University, Jack Donahue, coach of the Canadian Olympic Basketball Team, Dr. Shon Dutta of The University of New Brunswick and numerous coaches from the Coaching Association of Canada, for their inspiration.

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Introduction

MIND OVER MUSCLE is a biofeedback-aided, applied sports psychological training program that enables you to enhance your athletic performance through relaxed concentration, meditation and visualization.

What is biofeedback? Biofeedback measures your body's reaction to emotional and physical stress with great sensitivity, and 'feeds-back' changes in your moment-to-moment tension levels by means of a tone or meter reading.

Guided by heightened awareness and using natural relaxation techniques, you learn how to calm down and relax deeply.

What is GSR? Galvanic Skin Resistances is simply a measure of the opening and closing of the pores of the skin on your hands and feet. This is a reflection of changes in your mental and physical stress level.

Why is GSR control important? By learning the mental skills to control your GSR2 biofeedback monitor, you learn how to master stress and to reach deep levels of relaxation and concentration so necessary for visualization.

The MIND OVER MUSCLE program includes:

1. The GSR2 biofeedback monitor which identifies, and enables you to control your state of relaxation.
2. An audio programs: On CD 1, tracks 1 introduces the concepts; track 2 teaches you how to use the monitor; and track 3 takes you through a relaxation/visualization exercise. CD 1, tracks 4-9 (end) and CD 2 are an overview by six leading sports psychologists and coaches providing important information on various aspects of mental training and inspiration for your psychological preparation.
3. An optional video (DVD) sports visualization training program.

It is important to remember that MIND OVER MUSCLE is an EXPERIENCE. A dictionary can define the word "sweet" but it is much more meaningful to actually taste something sweet. In the same way, this booklet can explain how the program works, but to really understand it, you must actually use the techniques it describes.

Overview

To excel in any sport, or for that matter in any aspect of living, you have to be unconcerned with all the perceived threats from the future and the unnecessary trivia of the past. You need to be totally focused on the present moment and on the task at hand, physically relaxed and mentally focused. You have to be in the "now state." This can be achieved only if your emotions and thoughts are under your control.

Most people have "choked" at some point, either in a sports competition, while writing an exam, or during public speaking. The reaction to stress or fear, if not controlled, produces more stress, which in turn produces poor mental and physical performance. As Betty Wenz and Donald Strong of California State University have stated: "The stress reaction produces an anxiety syndrome that has specific physiological as well as psychological components that inhibit performance."

Excitement and fear: Both result in increased levels of arousal. Excitement is positive stress. Fear is negative stress. These two emotions must be controlled in order to experience peak performance.

When you tense even slightly many muscles contract, some of them antagonistic to those muscles that are necessary for performance. Relaxation permits you to channel energy to the appropriate muscles, producing "more" with "less" effort.

The GSR2 with The Mind Over Muscle program can help you achieve this optimum state. It will teach you to master the thought processes and emotions that diffuse the energy required for optimum performance.

Examining your goal is the first step in the development of your physical and mental capabilities. You may have Olympic aspirations, want to be the best that you can be, or just want to take a few strokes off your golf game. Whatever your goal, relaxed concentration and visualization can help you achieve it.

Visualization is most effective when you are relaxed. Let's examine the state of relaxed concentration, and, how to achieve it with biofeedback. Now read the GSR2 instruction manual and learn how to use it. Then listen to CD 1, tracks 1 and 2. Do this **NOW**.

"How To"

GSR2 BIOFEEDBACK/RELAXATION AND VISUALIZATION PROGRAM*

1. A quiet environment is important. Since muscular tension will raise the tone, allow yourself to be comfortably still.
2. Vary the schedule according to your requirements, but ideally try to practice at the same time(s) each day
3. To visualize most effectively, first you must be in a deep state of relaxation. You will be using the GSR2 to relax for a week or two before trying more advanced skills.

Week 1&2: Basic Relaxation Exercise (CD 1, track 2) once or twice daily, before you go to bed or when you awaken (15 minutes).

Week 3: As above with concentration exercises.

Week 4: Twice daily 15-minute Session (GSR2 with or without audio program). – Relaxation with Meditation.

Week 5: Two or three times daily 15-minute sessions (GSR2 with or without audio program). Relaxation and basic skills visualization.

Week 6: All sessions should begin with relaxation using the GSR2. Introduce visualization when you are deeply relaxed. Set no time limits. Begin to introduce advanced skills and elements of competition, varying the difficulty of your imagined performances.

Week 7: As In Week 6, visualize yourself mastering the most difficult aspects of competition.

Week 8: Prior to competition, visualize yourself (step by step) experiencing the winning performance, while keeping your arousal at its optimal level (not over- or under-psyched).

* This program refers to "weeks". However, some athletes might like to spend months rather than weeks. Indeed a Japanese world champion speed skater related to us that he spent 6 months learning deep relaxation. Go at your own pace. This is your program

Record Keeping Chart

Date	Session	Time Spent	Level of Relaxation		Subjective		Remarks, Obstacles, Breakthroughs, Comments
			Pre (1-10)	Post (1-10)	Clarity (1-10)	Control (1-10)	
Example	Jan 1/11	15 minutes	4	8	Ext -7 Int -3	Ext -2 Int -1	Was smooth but was unable to complete run, breathing deeply

Level of Relaxation:	Your subjective feelings of relaxation. 10 most, 1 least
Pre-post:	Before and after using the GSR2.
Clarity:	How clearly you saw the picture, smelled, heard, and felt the performance. 10 most, 1 least.
Control:	Did you complete the visualization to your satisfaction? 10 most, 1 least.
External:	Like watching yourself on T.V.
Internal:	Like really doing it – seeing, feeling, hearing, using all your senses.

Relaxed Controlled Breathing with the GSR2



* adapted from Nuernberger, (1981)

Breath control is among the oldest relaxation techniques in all cultures and a valuable method of gaining mastery over your stress or arousal levels. Breathing is a function which is both involuntary (breathing while sleeping) and voluntary (taking deep breath before diving). Unless you consciously control your breathing, it will reflect your unconscious emotions. Exercising voluntary control over your breathing is the first step in self-regulation, relaxation and meditation.

The average person breathes from 8 to 20 times each minute. A trained athlete breathes 4 to 6 times a minute. Most people breathe only into the thoracic region (upper chest), using less than 50% of potential air exchange. By using deep diaphragmatic (yoga) breathing, you can more than double your breathing efficiency. Controlled breathing is important because:

1. Your gas exchange is much more efficient.
2. You use less effort to inhale the same or more oxygen.
3. You increase the fluidity and stability of your movements.
4. It promotes deep relaxation which is essential for visualization.
5. It helps you get a good night's sleep, before athletic competition and regeneration after your performance.

6. Breathing deeply prior to competition helps you to control pre-competitive stress.

The Relaxed Breathing Cycle

To begin the breathing cycle, *first you must exhale completely*. Initially for the first few minutes, to learn this breathing, you may wish to make a sound as you exhale whispering “Haaaah” very softly. Allow your chest to fall expelling the air. MOST IMPORTANT, continue the exhalation by contracting your stomach in, expelling the remainder of the air in your lungs. At this point let the air flow back in by allowing your stomach (abdomen) to relax and widen. (It looks like you are filling the stomach with air, but in fact, it is your lungs). Continue to inhale allowing your chest to expand slightly. Then repeat the exhalation cycle by allowing the chest to fall gently, feeling the air flowing out.

If you are lying down, your chest and stomach will fall naturally because of gravity and you will not have to pull your stomach in. However, as you begin your inhalation you should expand your stomach voluntarily, allowing the air to flow in.

Important! Breathe through your nose, if it feels comfortable. Allow your jaw to relax. Allow your breathing to be effortless. Remember that breathing is a rhythmic cycle. Never force it, simply observe it happening and experience it.

When practicing diaphragmatic breathing using the GSR2, if the tone increases significantly you are trying too hard. Focus on your exhalation and allow your inhalation to occur effortlessly.

Breath Control and Competitive Stress

During levels of high stress, such as competitive situations, many athletes have a tendency to hold their breath, hyperventilate, or take short sharp breaths that magnify the negative effects of stress. This decreases athletic performance.

As you fine tune your optimum level of arousal you will be able to use slow deep (diaphragmatic) breathing to calm yourself down or quicker diaphragmatic breathing to energize.

Three Exercises for Breath Control

1. Whenever there's normal tension build-up, we tend to sigh or yawn. This is natural stress reliever – so yawn right now and feel the release of tension.
2. The yawn/stretch is used to promote relaxation in combination with breathing. Right now, stand tall place your feet shoulder width apart, arms at the side at 45 degrees angle, palms open and head back. Breathe in as you yawn naturally.
3. After you yawn, continue the exhalation by pulling your stomach in and then let your stomach relax and let the air flow in, effortlessly. This is an excellent tension releaser – try it a few more times.

Relaxed Concentration with the GSR2

The mind, like a laser beam cutting through steel, is capable of incredible feats when it is focused. Think of the news reports of a frail mother lifting a car off her child; the body has few limitations when directed by a strong and loving spirit.

Relaxed concentration is the key to superior performance in any endeavour. Right now, listen to CD 1, track 2 (using the GSR2) and follow the relaxation experience. Do this for a week a month, or as long as it takes for you to feel confident that this relaxation skill has been well learned.

Most people do not think much about their thoughts. Our thought processes are so much a part of us we take our thoughts for granted. The following exercise will help you get in touch with your “unconscious” flow of thoughts.

Using your GSR2 in a quiet environment, and in a comfortable position, take an everyday object, such as a spoon or a glass, and place it in front of you. Look at this object for one minute - let it become the object of your attention. Should distracting thoughts arise, and they invariably will, simply acknowledge them and let them pass. This seemingly simple task takes most people a while to master. Extend this practice and continue for a week or longer, until you have been able to hold the object in your unbroken concentration for a minute.

Next, to assist you in your concentration, choose a restful image, such as a flower or a candle flame. Allow your gaze to rest on this object. Let your eyes relax and "unfocus". Be aware of your breathing. If thoughts should occur, acknowledge them and let them go. The purpose of this exercise is to quiet your mind. After a few minutes allow your eyes to close and see if you can hold the image in your "mind's eye" Recognize that relaxed concentration with biofeedback is the simplest form of meditation, a technique for quieting the mind in preparation for visualization

Meditation with the GSR2

Meditation is thought directed by will. In its most general sense, it is thinking in a controlled manner. You decide how you want to direct your mind for a length of time, and then do it. When extraneous thoughts occur, you return to the focus of your meditation.

This may seem simple, but to demonstrate how difficult it is to control your thoughts, for the next couple of minutes, do the following exercise. STOP THINKING. Put this booklet down NOW, and return in two minutes.

Welcome back. How long were you able to keep your mind blank? If you have little previous experience, chances are your mental silence was interrupted after a few seconds by "I'm trying not to think" or "I'm not thinking" and so on.

The thought that you direct your attention to could be anything from building a house to writing a story. Or you could direct your attention to a word and concept such as Beauty; Love; Truth, or *to your chosen Sport and its many facets*.

All religions have a meditative component Buddhism, Hinduism, Judaism, Christianity, Islam, etc. Meditation that is based on religion is a powerful force. Whether you believe in a divine being, a universal essence, or the divinity within each of us, the result is the same: people who believe have that much more power. Whatever your cultural or spiritual beliefs are, use the images (a candle, a rose) or techniques (kneeling, chanting or prayer) that you feel most

comfortable with.

Meditation can be the suspension of thought; a source of motivation and inspiration. Meditation quiets the mind and sets it free. When you enter a state of meditation all your body functions slow down. Your heart rate, respiration and digestion slow down, your blood pressure lowers. Your muscles relax your extremities (hands and feet) warm and your skin resistance increases. The GSR2 monitors your skin resistance and the tone may indicate when a disruptive thought interferes with your meditation. The GSR2 can be used as a centering device; or it can be experienced as a "clock ticking in the background", which although not attended to, is giving you information on your state of focus or detachment. Perhaps a poem can best illustrate this idea:

*Are words our master or are they our slave?
A hopeless conundrum but let me save you from this riddle. For it is only speech.
Internal and externalized which requires the reach for definitions of ideas conceptions. and thought which are inherent to mankind, and need not be taught.
But words are not plastic, but rigid and fixed and it matters not how they are mixed, they still must mean what the dictionary said, and they structure the ideas that go on in your head.
So until you slip their slippery noose
and really let your mind go loose,
to wander through emotion sensation and space, you'll never understand, the meaning of grace.
Lawrence Klein 1971*

Meditation and relaxation serves as a regenerator. During your training or competition, you are reaching, stretching, lunging, jumping, twisting and turning using tremendous amounts of energy. Shutting down your system lets you recharge your body and mind so that when you return to your sport, you can again give it your all. After every workout, allow yourself at least 10 minutes of deep relaxation or meditation. This can be incorporated into your stretching or done afterwards.

The relaxed stretch provides an opportunity to stretch the muscles thereby allowing the body to metabolize built up lactic acid more easily. You can focus and meditate on healing and strengthening the muscles and joints you are stretching. Depending on the length of your workout or competition, you may require up to one hour. Dr. Sue Wilson of York University works with the Canadian Olympic Track and Field athletes and credits the “Power Hour” or “Power Pause” for significantly accelerating their training. Deep relaxation with the GSR2 provides the regeneration necessary for a return to a higher level of practice, resulting in an accelerated performance.

The Power of Visualization (Imaging)

We all learned to walk "naturally"; instruction was minimal and nonverbal. We saw others walking and copied them. This process of "picturing" or "imaging" is a powerful method, both for skill acquisition and improvement.

Mental Rehearsal, or visualization, is very simply SEEING (or experiencing) yourself in your mind. Once you start to use this technique, your performance will improve so dramatically that you will want to incorporate visualization into your daily routine. Virtually all top level athletes see themselves performing their sport before actually doing it. Whether playing golf or tennis, diving or swimming - indeed in every athletic endeavour - they mentally see themselves performing perfectly before they actually do it. There's an old joke about someone stopping a fellow with a violin case on a New York street and asking him how to get to Carnegie Hall. His response was "practice, practice, practice." The body, unlike the violin, has limitations. You can only run so far, lift so much weight, swim so many laps, and jump so many times. Fortunately, you can extend physical practice ten-fold with visualization.

For example, in a recent study, 30 students, inexperienced at basketball, were taught to shoot foul shots. Then, they were divided into three groups. The first group shot baskets every day for 1/2 hour, the second group visualized shooting baskets perfectly, but did not actually shoot them The third group did nothing.

One month later the three groups were retested. The group that did nothing performed poorly. However, there was no

statistical difference between the first two groups (those that actually shot baskets and those that only visualized). Both did well!

To give you a better idea about visualization, let's practice with a trip to our kitchen in your "mind's eye." (Note that people imagine in different styles, some see it in living color, some in black and white. some feel it in their body and others just think about it). Now, in your mind, go to your refrigerator, and take out a lemon. It is cold to the touch, and you hold it close to your nose and smell the familiar tangy fragrance. You pick up a knife, put the lemon on the cutting block and cut the lemon in half. You hear it crunch, you pick up one half of the lemon and put it to your mouth and then take a big bite out of the very sour lemon.

You can SEE, FEEL, HEAR. TASTE and SMELL this entire scene. Close your eyes for a moment and experience these sensations NOW.

What did you experience?

PROBABLY YOU'RE SALIVATING RIGHT NOW

Note how your thoughts and images affect your body. You can now appreciate the power of a thought, and the power of visualization

Visualizing Your Sport

Now, choose a piece of equipment that you train with, or use in competition, such as a ball or racket. Physically place it before you, and inspect it. Note all the subtle details. Allow your gaze to soften, and sharpen, and simply be there, without thought.

Pick it up. Hold it. Feel its texture and composition. Feel it as an extension of yourself. Merge with it.

Now close your eyes for several minutes and mentally see yourself using your equipment perfectly. You are now introducing VISUALIZATION – feeling your perfect performance with all your senses.

Visualizing With the GSR2

To introduce visualization using the GSR2, first relax deeply for as long as you need, then keep the tone low while rehearsing with your imagination, using the CD 1, track 3.

Slowly introduce the basic skills of your sport. Once you are clearly visualizing your basic skills you can introduce more advanced skills. Stay within the scope of your ability and experience the skill PERFECTLY. Vary the difficulty of your performance gradually, establishing success at each level mentally, and then physically confirming it.

This activity will build confidence and success. By practicing the simple elements of your performance you will learn

to control the more difficult, competitive ones. Do this for a few weeks, allowing the clarity to sharpen. You are “tuning in” your mental T.V. Build slowly, moving from success to success. Spend a few weeks at each level, or so long as you need, since you are laying a foundation before advancing to competition.

Watching yourself on actual video is useful. You can view your technique and analyze it with your coach, correcting deficiencies in your performance, then keep rehearsing the corrected movements mentally. Subsequently, when you visualize without the actual video machine, you will be seeing that the perfect performance in your mind’s eye, thereby reinforcing the learning.

In addition, you can enhance your performance by watching outstanding athletes (your role models) performing the skills you are performing or wish to perform. A video is an excellent tool for this. It is important to be in a deeply relaxed state, so that when you watch your role model’s perfect performance, you are imprinting it on a subconscious level.

Remember, to see your role model perform perfectly and imagine the performance as your own. Eventually you will be able to visualize your own performance being as perfect as theirs. In your mind, be a world champion, performing with perfection.

You might ask yourself, “Why should I see myself doing things I can't yet do?” It is because mental training makes a neuro-muscular (Mind Muscle) connection to train your muscles, and also builds your confidence to achieve your

goal. Mental rehearsal of your skills can allow you to do things mentally before you can accomplish them physically.

Robert Browning wrote, “A man’s reach should exceed his grasp, or what’s a heaven for.” Once you decide to break this voyage down to smaller achievable steps that you practice perfectly over and over again.

Visualization Images

Visualization and “after images” are distant relatives. We have developed a format which uses the after image of a visual experience to help you learn to visualize complex scenes – think of it as the first step, or a set of training wheels.

There are three easy, three intermediate and three advanced visualization images at the end of this book. They are designed to enhance your ability to concentrate, and to focus your attention. They are to be used after you have learned to relax deeply with the GSR2.

Vary the difficulty of your performance gradually, so that you can establish success at every level.

In a deeply relaxed state, stare at one of these images for a full minute. Then close your eyes, relax, and hold the image in your mind. Most people report a reverse image, which they are able to hold in their “minds eye”. Be patient: initially the after image might be quite brief. As you progress, see if it has disappeared. After you have succeeded with the easy image, try the intermediate and then advanced images.

While these images may be useful for many people, you might experience visualization in a different form. Everyone has their unique way, so follow your instincts.

Advanced Relaxation Techniques

The relaxation techniques on the audio program have been used successfully by thousands of Olympic and professional competitors, as well as hundreds of thousands of people from all walks of life.

Many of the competitors have continued their own experience with some of the advanced techniques.

As with any sport, with practice you will become more and more proficient at relaxation. The most important rule is to stay with whatever technique you choose for at least one month. The GSR2 will provide you with continual information on your state of relaxation so it can be used with whatever method you choose. The underlying theme is to develop a quality of mindfulness or centeredness.

Mantra is an eastern word which means “a word or phrase repeated over and over as a meditative exercise”. Mantra meditation works through habituation. Just as you become habituated to the noise from an air conditioner, you erase all thought from your mind while reciting the mantra. It can be a spiritual mantra or prayer, such as *Lord of the Universe*, a simple word such as “one” or “ohm”, or a nonsense syllable.

Focus on your diaphragmatic breathing and stretch the word out. For example “ohm” is pronounced “oohmmmm” on the out-breath.

Remember, whatever word you choose, it is the half hour daily for 30 days that produces the results. After your meditation is over, remain in place for five minutes allowing your mind to receive the benefits of your meditation.

Contemplation

Involves concentration on an idea, word or object, letting it fill your entire mind. The experience is the same as mantra meditation, but the experience is visual, not verbal. If you are more verbally than visually oriented you may prefer mantra meditation to contemplation. Mantra meditation is an excellent preparation for contemplation. You may also choose to *combine* mantra meditation and contemplation.

Visualization

When you close your eyes you will probably see lights or images flashing before your eyes. Relax for a few minutes and the lights will change into a flow of images in your “mind’s eye”. If you try too hard to concentrate on them they may disappear, so use your mantra meditation to relax. After a few minutes the images in your visual field will become easier to control.

You can introduce a symbol of image to engrave in your “mind’s eye.” You can use the word “circle” as a verbal

mantra. Or, you can use contemplation for the first fifteen minutes with your eyes open and the visualization for another fifteen minutes with your eyes closed.

A spiritual guide or master is recommended for advanced meditation. Reading from the suggested list below is also desirable.

Additional reading

Jewish meditation A Practical Guide
Aryeh Kaplan
ISBN # 0-8052-0781-3

Meditation in Action
Chogyam Trungpa
ISBN # 394-73025-9

The Monastic Journey
Thomas Merton
ISBN # 0385-140-940

How to Meditate
Lawrence LeShan
ISBN # 0553-244-531

Creative Visualization
Shakti Gawain
ISBN # 0553-270443

TWO KEY FACTORS IN VISUALIZATION

The two key are clarity factors in visualization are **CLARITY** and **CONTROL**.

Clarity involves the details of the competitive event. A swimmer, for example, would see the pool, taste the water, smell the air, hear the crowd, .and feel the water. Using all your senses improves the clarity of the visualization.

CONTROL is the ability to initiate and complete visualization. Practice each skill perfectly in your mind, repeating those that you have problems with in reality. See yourself in perfect form.

When you can clearly visualize your basic skills, begin to develop control. You can mentally zoom in, slow motion, or freeze frame your visualizations, allowing you to see your performance in its ideal form.

Internal Versus External Styles

Both internal and external visualization are powerful tools, and what follows is an explanation of when to use either or both styles. People have their own preferences. Work with both, but remember that you are the director of your “Mental Movies,” and you can and should follow your own style and instincts.

LAURIE VS JERRY

When working with the Women's Canadian Downhill Ski Team in 1982 we noticed that Laurie Graham and Jerry Sorensen had opposite results when visualizing with the GSR2. One's tone stayed low while the other's went up higher and higher, until it was beyond hearing. When asked afterwards, the one with the rising tone related that mentally she had actually experiencing skiing a fast icy course (Internally), while the other had been relaxing in front of her "T.V. screen" seeing herself ski the same course (External).

Note, therefore, that when you are a spectator to your own performance (external) it is normal for the tone to remain fairly stable: however if you are mentally actively participating, (internal) then probably expect a strong GSR response.

Remember that both fear and excitement can cause a strong GSR response. Identify why the tone went up and if you are fearful, return to the external mode of visualization until there is no more activity.

Internal

The internal or active style of visualization is often used in developing the feeling of optimum performance in a narrow focus mode. For example, in “feeling” your performance, you experience that you are competing perfectly and successfully.

EXERCISE: Imagine that you are performing your sport perfectly. Experience it through your five senses. **SEE** what you would see. **FEEL** what you would feel. **HEAR** what you would hear. **TASTE** what you would taste and **SMELL** what you would smell. Stop and do this **NOW**.

External

The External or Observer style of visualization is often used in developing clarity and correcting performance in the broad focus mode. For example, you “see” yourself on your mental T.V., while analyzing and correcting your performance.

EXERCISE: Imagine seeing yourself on widescreen television: where you see and hear yourself for the outside. You are relaxing in an easy chair seeing yourself clearly performing your sport. Stop and do this **NOW**.

You can mix external and internal visualization styles. For example, world famous runners relate that they “see” themselves (external) in the starting blocks; the gun sounds and they explode out of the blocks. Then they “feel” themselves (internal) striding throughout the race, and finally “see” themselves (external) leaning towards the finish. They have viewed their start and finish often, and “see” themselves as if on television, but “view and feel” themselves from the inside during the race.

To be successful, it is important for you to be comfortable with your visualization method. As you become more experienced you can try to visualize with your eyes open – perhaps at the scene of the competition. This can create a bridge between the visualization and the actual performance.

Wide and Narrow Focus

Wide focus refers to seeing many details at the same time. Narrow refers to seeing just a few details.

Wide focus refers to seeing many details at the same time. Narrow refers to seeing just a few details.

Some sports, like football, require a constant shift from broad focus to narrow focus. For example a quarter- back backing out of the slot (wide focus), sees where all the players are, and focuses on the player to whom he is going to throw the ball (narrow focus). Other sports like weightlifting require only narrow focus. Learning which type of focus is most appropriate, and when to shift, can be practiced during visualization.

In a relaxed state, choose an object, at some distance in front of you. Look directly ahead, seeing everything around you as well as the object, (wide focus). Gradually narrow your focus so that only the object remains in your vision (narrow focus). Little by little widen your focus back to the original vision. Zooming in and out, and narrowing and widening your focus is necessary in all sports during competition in order to exclude distractions.

Now using visualization, consider an 8 inch wide plank on the floor, with the task to "walk the Plank" Easy? You bet. Now move the plank between two buildings 60 stories high, and walk back across the plank. Not on your life? Notice how the fear factor takes hold. What thoughts entered your mind at that moment to create the fear? The necessity to "narrow" your focus becomes crystal clear.

What is YOUR fear factor? How can wide/narrow focus affect YOUR athletic performance? What are your sports demands? Does it require explosive power and speed? Grace and coordination? Calm nerves and a subtle touch?

What factors interfere with your peak performance? Noise from the crowd, a tough competitor, a shift in the wind or a negative thought? By using the GSR2 while visualizing your performance you can become aware of the things that break your focus and affect the tone. See how wide and narrow focus can eliminate those breaks in concentration. The ability to focus appropriately will help you control your fear.

The Power of Positive Thinking

Positive thinking is an important component in learning visualization. There is a wealth of literature available on the subject of positive suggestion, and for good reason. It really works! It is important to remember, however, that for positive suggestion to be most effective it should be done in a deeply relaxed state.

While you are performing your visualization, repeat an appropriate word(s), which sum up the most important elements of your sport. For example, if you are a diver you might want to choose the word “smooth”. Or if you are on the balance beam you might select “centered.” Or in an archery competition “focused” would be appropriate. Before you begin your sport, you should mentally repeat your “*seeding word(s)*” to empower your performance. Learn to expect success by seeing yourself as a success.

When you are deeply relaxed before and/or after your visualization, you can mentally repeat affirmation such as:

“With each workout I am getting stronger and stronger.”

“I am becoming more skilful with each practice.”

“My body knows how to perform perfectly.”

Create any totally positive statement to achieve your goal.

It is also important to reframe negative statements or situations. A lesson can be learned from the Chinese who have the same word for “crisis” and “opportunity.”

A few years ago, speed skier C.J. Mueller found that the constant delays in speed skiing (due to wind, light conditions, etc.) would irritate him so much that he had yet to win a race. After learning relaxation techniques and practicing visualization skills, he turned these delays from an aggravation into an opportunity to practice visualization. By doing so, he not only won his first race, but he also broke the world speed skiing record – becoming the first man to ski over 130 M.P.H.!

The next time you say, “This hill is too steep for me,” finish the thought by saying, “What an excellent training opportunity.” In this way, you turn adversity into an advantage and crisis into opportunity.

The Right and Left Hemispheres

Right/left brain function is an area of vast research. What follows are some brief, but noteworthy, points which will be of particular interest to athletes.

When you relax with the GSR2 you reduce the interference of the left brain – this allows both hemispheres to function in their optimal way.

- verbal
- logical thinking
- information

We actually have two brains, which are attached by the corpus callosum. Dr Roger Sperry did fascinating research on patients who had to have this cord cut. He found that in most right-handed people, the **right brain** is used for.

- visual
- intuitive
- “doing” functions.

The **left brain** processes:

For example, you have probably met an old friend and recognized him (visual – right brain) but were unable to remember his name (verbal – left brain). Your brain processes information in two ways. The right brain is the seeing, visualizing, sensing, feeling and emotional brain. The left brain thinks, judges, criticizes and, because of the way we are educated, it is the dominant brain. When you are performing your sport, a complex (right brain) skill, your left brain might judge your performance as inadequate, and interfere with thoughts, such as: “I’ll never get this right” or “I’m so uncoordinated,|” etc. Or your left brain will think that it has to be helpful and offer advice such as “keep your head down,” or “Watch out!” etc. Increasing your right brain ability with visualization will improve your performance.

For example, your sport is not only a complex skill, but also a joyous and fun! When you whistle or hum when practicing your sport, you quiet you left (verbal and criticizing) brain and allow the right (visual, doing) brain dominance. So, the next time you find yourself struggling at your sport, try humming or whistling a tune to reduce left brain interference and harmonize the hemispheres.

Relaxing with the GSR2 allows the right brain to function in its optimal way, in images. Here are some other ways to increase the function and ability of the right brain.

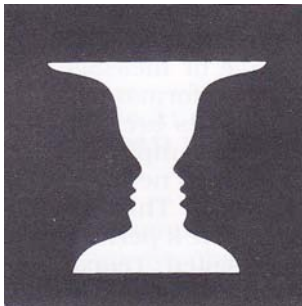
You may want to post images such as posters in your home or work environment that remind you of your ideal performance. These will reinforce your mental and physical practice. Also, when you fall asleep, your mind shifts from the “verbal” to the “visualization” state. This is a good opportunity to use the time when your gently drift off to practice your sport.

To train the right brain function, here are a few exercises:

1. Take a pen and paper and using your non-dominant hand (the one you do *not* write with), draw a picture of your sports site, training area or whatever you choose.
2. Using your non-dominant hand, write a poem about your sport. To get you started, here is the first line: I love my sport ...

We have been educated in logical, left brain hemisphere. The following right brain visualization exercise will strengthen our memory and imaging ability that has been schooled out of you.

3. Choose a specific day to practice. Every $\frac{1}{2}$ hour, during this day, pause for one minute, and “replay” what you have done for the past half hour. You can set a digital watch to remind yourself of the time. Your review will appear as a series of brief images or snapshots in sequence. As your right brain’s ability increases, take your 1 minute recall will soon take only 30 seconds, perhaps only 15 seconds.



Look at this figure. Stare at it for a while. Does it shift images? If not, turn the page for the answer to this visual puzzle.

Subliminal and Liminal Conditioning

Remember it is not what happens to you, it is the way you react to it, that is important.

Verbal or visual subliminal messages (those that are below everyday conscious perception) can have such a powerful influence on our behavior, that at one point the government had to regulate its use by the advertising industry. The classic story of subliminal advertising took place in a movie theatre that flashed words and pictures like "Drink - Coke, Eat - Pop-corn". Sales soared 58%. Subliminal conditioning, if used by an athlete in a deeply relaxed state, and with the correct image or message, can positively affect performance.

Some signals are positive, many are not. For example, today's media bombard us with news, and the news is rarely good! This can adversely affect an athlete's performance. Biofeedback-assisted relaxation is an excellent method of identifying and letting go of negative messages. Negative emotions (which raise the tone of the GSR2) tend to linger longer than positive ones. As soon as you identify a disruptive thought, allow it to pass from your mind, like a leaf floating on a stream, and return to your relaxations.

One of Drs Erik Peper and Andrea Schmid's advanced liminal exercises with the GSR2 was to have U.S. Rhythmic Gymnastics teammates try and psych one another out. One member would sit with the GSR 2 tuned in to a low tone, while the teammate made negative statements or simulated what opposing team members had done in the past. The

ideates to remain calm and centered in a stressful environment.

People around you can influence you and your performance by a look or a word, if you let them. Remember it is not what happens to you, but the way you react to it, that is important You can use negative events or stressors to trigger your relaxation and affirmations If you feel yourself becoming hassled, catch yourself before it gets out of hand, take a deep breath and say something positive to yourself.

Physical and Mental Fitness Principles

The five underlying principles for a development program in acquiring physical fitness apply to mental fitness as well. What follows is an explanation of these principles in relation to body and mind training.

Physical Fitness relates to your physical work capacity in the following five areas:

1. Cardiovascular function
2. Respiratory function
3. Muscular efficiency
4. Strength
5. Muscular endurance

A healthy cardiovascular system is necessary for the efficient functioning of your body. Most of the good fitness programs are based on improving the cardiovascular pulmonary (heart lung) systems, and the developing all five of these abilities.

Other elements such as motor fitness, - which includes strength, speed, agility, power, coordination, balance, – and other components such as body weight, relaxation, and flexibility round out the total fitness program.

Your physical working capacity is the base from which your conditioning program progresses. Certain guiding principles should form the basis for your conditioning program. Since your body is controlled by your mind, the principles that apply to your body, apply to your mind as well. Five common principles are generally recognized in program development.

Almost all Olympic athletes would say that 80% to 90% of their performances are dependent upon their mental state – yet most athletes spend almost all their time in physical training.

Principle No. 1:

The Overload Principle

Physical:

In order to accomplish conditioning and improve physical fitness, your body must do more work than it normally does.

Edit your visualization so that you allow only perfect performances. Remember, what the mind can conceive, your body can achieve.

For some people the amount of overload necessary is surprisingly small. Fast walking may be all they need to produce beneficial results in body conditioning. In an exercise program, overload is accomplished in two principal ways:

1. By increasing the total work you do (e.g. running further), which is emphasized during early exercise sessions, and
2. Increasing the work rate (e.g. running faster), which is applied as you become better conditioned.

Mental:

Increasing levels of mental control must occur if you expect higher and higher levels of physical performance. Thus, in order for you to move from one level to another, you must learn to master the negative thoughts and emotions that stop you from fully exploring your potential. For example, a particular negative past performance might give you a fearful anticipation of future performances.

By acquiring the ability to relax whenever you choose, and then visualizing your performance perfectly in a deeply relaxed state, you can expect to overcome fear caused by past negative experiences. Gradually you will view your future performances with a fearless and positive approach, leading to successful mastery.

If you fail during visualization, most likely it will be matched by the same experience in competition, since one influences the other. If during visualization you detect an error, you should mentally rewind, and then replay the event perfectly. Usually the tone of the GSR2 will rise when you experience difficulty. Thus, you can replay the scene enough times until finally there is little reaction on the GSR2, and there is no more hesitancy in your practice. In this way, you can achieve total mastery. Edit your visualization so that you allow only perfect performances. Remember, what the mind can conceive, your body can achieve!

To do more work or play within a reasonable length of time, requires a focused mind, a centering of yourself on the task at hand, accepting the positive thought processes, and rejecting negative ones.

The GSR2 will facilitate this process. For example: to run farther and faster, you must have the ability to reject the wandering negative mind that says, “It hurts, what am I doing this for?” or “I think I'll walk,” or “I could be sleeping.” Your ability to focus your mind will enable you to meet the challenges of your training and competitive goals. This is not to say that genuine body danger signals should be ignored (chest or joint pains for example): however, you should recognize that the mind can be a trickster, and requires continual supervision

If you have a negative thought during your performance such as "I can't keep up," ask yourself: What can I do? How can I solve the problem?

- Should I adjust my stride?
- Can I breathe from my abdomen, thereby getting rid of this stitch?
- How have I dealt with this in training?
- What would my coach, or my inner coach, suggest?

This is not to suggest that you should carry on an internal dialogue. However as you become familiar with your competitive ability, you will know if you are really reaching your limit, or if it's your wandering mind that is holding you back.

PRINCIPLE NO. 2

THE PROGRESSION PRINCIPLE

Physical:

If higher levels of fitness are to be reached, you must be repeatedly exposed to increased levels of overload. As you continually handle a given work load, you make physiological adjustments, and become adapted to them. Hence the level of exercise is no longer an "overload". As conditioning improves, it is necessary to progress to a new overload level by undertaking more difficult and/or demanding exercise routines.

Since not all individuals improve at the same rate, competitive attitudes are discouraged in group conditioning sessions. Through a series of overloads, you will reach a level of physical fitness that you consider high enough for yourself. At that point you probably should look for a combination of exercises and sports that will hold your interest and keep you active.

Mental:

Just as one moves from easy beginners' physical conditioning programs to more demanding intermediate and expert conditioning programs, so to the use of the GSR2 requires a progressive yet challenging mind program. The beginning judoka, when faced with an opponent wearing a higher belt, is initially intimidated by what his opponent wears, because of past experience and memories that he brings into the present and what he fears for the future.

A progressively positive mental attitude during training will facilitate a tough competitive attitude.

His physical skills and strength may be equal to, or even exceed, the level of the opponent he faces, but he has not acquired the mental skills that allow him to see each opponent as a challenge - a situation not be feared, but rather an opportunity for learning and excelling. Mind Over Muscle can teach you the mental focus necessary for this very different way of viewing challenges.

If, in the middle of competition, you start think of how tired you are, how fast your opponent is, etc., the match is in jeopardy, because the positive mental frame of mind so necessary in overcoming any physical or mental challenge has been lost. A progressively positive mental attitude during training will facilitate a tough competitive attitude.

PRINCIPLE NO. 3:

THE USE-DISUSE PRINCIPLE

Physical:

Use promotes function, disuse promotes deterioration. This holds true for the body as a whole, or for its individual parts. A good exercise program should include all components of physical fitness (endurance, flexibility, strength) involving all of the muscles.

The use-disuse principle also makes necessary an adequate frequency of exercise. Three sessions a week of forty-five minutes to an hour are the minimum recommended. Two sessions a week are generally considered the absolute minimum to achieve any consistent training effect.

Mental:

At the mental level, disuse promotes deterioration of the ability to control or center one's energy: just as a muscle deteriorates when not actively used, so too does the mind.

With the Mind Over Muscle program, once the mental skill imaging has been learned, it is not forgotten. As in riding a bicycle, once the skill is acquired, it is hardly ever lost. Of course, the more you practice, the better you will get. Aim for consistency. Try to practice at the same time every day. Remember, when you do something more than once, you are creating a habit (good or bad); when you avoid doing something, you are breaking a habit.

Relaxed visualization, like exercise is easier if it is done on an empty stomach (allow one hour after meals). Depending on your body rhythms, certain times of the day will be better than others. Discover which time is best for you. Regularity of practice is of utmost importance, (five to thirty minutes a day is optimal). It is better to train for ten minutes, ten times a week, than twice a week for thirty minutes. The relaxation and visualization experience will become a welcome respite, and the sessions can be gradually extended.

Program No. 4: Specificity of Program

Physical:

Specific improvements in physical fitness are produced by specific kinds of training. Since our body responds directly to the demands placed upon it, the effects are not interchangeable.

Thus, aerobic exercises develop cardiovascular capacity, and resistance exercises develop strength. As stated above, a good exercise program should include all components of fitness; furthermore, rates of progress should be established for improvement of each specific quality desired.

Mental:

Just as the body requires its own regimen, so too should your mental approach be tailored to your needs. Each sport requires different skills – some require fine motor control (e.g. archery or golf putting) while others require explosive muscular efforts (e.g. sprinting or weightlifting), and still others require lightening reflexes (e.g. racket sports or skiing). Your mental training should cover your sport's basic skills, and your sport's specific challenges and goals.

Remember, when you do something more than once, you are creating a habit (good or bad): when you avoid doing something, you are breaking a habit.

Principle No. 5: Individual Differences

Physical:

Each person responds to a training program in a unique manner. Factors related to the individual rate of response are a person's age, body type, degree of obesity, habits of rest and sleep, nutrition, injury and disease, and motivation. Some people should walk while others run; some may do bent-knee sit-ups while others are only able to lift their shoulders from the floor. A good program allows for this while avoiding competition between participants.

At the optimum point for a particular task you have that feeling of exhilaration.

Mental:

There is an optimal range or level of arousal for each task; above or below this, you are not at your best. By learning how to control your own level of arousal you will be able to get to the top without going over.

On the under-psyched side of the optimal range you may have feelings of gloominess, hopelessness, futility, and guilt for not training.

On the over-psyched side, you could have uncontrolled fear, high anxiety, heavy sweating, rapid heart rate, upset stomach, tense muscles, diarrhea, an increase in blood pressure, diminished memory, nightmares, indecisiveness, increase in number of errors, irritability, insomnia, or an increase in urination.

At the optimum point for a particular task you have that feeling of exhilaration, high motivation, mental alertness, high energy, good memory and recall, sharp perception, and calmness under pressure.

You can monitor the increases in arousal with your GSR2. One world champion skier's strategy for psyching up for a downhill run is to vibrate with excitement, pumping his arms and hands, while visualizing a bear behind him, getting his adrenalin up before the start himself out to propel of the starting gate. With experience, you will begin to know and attain your optimum state of arousal for each task, and each moment during the task. Usually "getting up" is less of a problem than "going over." Fortunately you can learn bi-directional control of your GSR2 (being able to raise and lower your level of arousal), to help you develop the ability to both "psych up" and "calm down" most effectively. This may sound confusing at first, but as you proceed, you will become a master at controlling and tuning your own levels. Perhaps the metaphor of a symphony will help. You are the composer, the conductor, the orchestra and the melody itself. With practice, you will master your symphony and your self-confidence will grow.

There are only a few sports, such as target shooting or putting in golf, where the movement and muscular exertion do not prohibit the use of the GSR2 monitor throughout the complete event. If you decide to use the GSR2 in these circumstances, remote electrodes (see GSR2 instructional manual) attached to your toes will free your hands, so you can actually "hear" your arousal level during practice.

At the optimum point for a particular task you have that feeling of exhilaration, high motivation, mental alertness, high energy, good memory and recall, sharp perception, and calmness under pressure.

On the under-psyched side, you may experience a decrease in motivation, an increase in accidents, increased alcohol consumption, a large change in appetite, lethargy, negative feelings, a feeling of dullness, apathy, or an erratic sleep pattern.

On the over-psyched side, you could have uncontrolled fear, high anxiety, heavy sweating, rapid heart beat, upset stomach, tense muscles, diarrhea, an increase in blood pressure, diminished memory, nightmares, indecisiveness, increase in number of errors, irritability, insomnia, or an increase in urination.

Athletic Psychological Questionnaire

This evaluation can be used to assist you in identifying possible areas of high stress, and in overcoming them through the use of relaxation and visualization. You may wish to have a friend read the following questions to you one at a time.

Ensure that you:

- are sitting comfortably and have relaxed for several minutes.
- have the GSR2 set at a low pitched tone,
- have a pencil and paper near your free hand,
- cover up all future questions.

Remember to allow yourself 15 seconds to visualize the question or situation asked for. Listen for the strength of the response and length of time to come back to the baseline tone. Allow at least 30 seconds of relaxation after each answer.

Circle No. 1, No 2, or No 3 (No. 1 - little stress, No 2 - moderate stress, and No 3 - considerable stress). Then rate the emotion as positive or negative i.e. 1P or 1N or 2P or 2N, 3P or 3N. If no significant response occurs, leave the question blank. Now let's begin.

1. Allow yourself to clearly visualize your relationship with your coach. How do you feel about your coach?
..... 1 2 3
2. Allow yourself to clearly visualize your physical training environment. How do you feel about it?
1 2 3
3. Allow yourself to clearly visualize your training mates. How do you feel about them? 1 2 3
4. Allow yourself to clearly visualize your personal goal. How do you feel about your goal? 1 2 3
5. Allow yourself to clearly visualize your present state of physical fitness. How do you feel about it? 1 2 3
6. Allow yourself to clearly visualize your present state of mental fitness. How do you feel about it? 1 2 3
7. Allow yourself to clearly visualize your eating habits. How do you feel about them? 1 2 3
8. Allow yourself to clearly visualize yourself being number one on your team or in your sport. How do you feel about it?
..... 1 2 3

Summary:

You are the best judge of your responses. If your GSR2 responded more to some questions e.g. personal goal (4) and eating habits (7) than to equipment (11) or to instructions (12). It could be that you have strong positive feelings about your goals, and strong negative feelings about eating habits (or vice versa).

Conversely, if you have a small response to your equipment (11), and your instructions (12) you could surmise that you have little stress about either or that you like or dislike, but not strongly.

The GSR2 can only indicate the level of arousal – the strength of emotion, not its quality. However, it is a useful tool to have in your self-examination. Moreover, the GSR2 will facilitate your learning deep relaxation and visualization, alerting you to when you are losing your focus and detachment.

9. Allow yourself to visualize your desire for excellence. How do you feel about it?
..... 1 2 3
10. Allow yourself to visualize your belief that you can win. How do you feel about it?
..... 1 2 3
11. Allow yourself to visualize the quality of your equipment. Are you satisfied with the quality?
..... 1 2 3
12. Allow yourself to visualize your reaction to advice or instruction. How do you feel about it?
..... 1 2 3
13. Allow yourself to visualize your degree of self-discipline or determination. How do you feel about it?
..... 1 2 3

Conclusion

Just as we are facing serious environmental pollution, so too we must be concerned about ethical pollution in sports. Coaches and athletes must be educated in the noble character-building goals of sport.

Athletes, coaches and society in general are experiencing increased levels of distress, commonly referred to as stress. While a certain level of stress is positive, activating your flight or fight response over an extended period of time can weaken the immune function and result in physical illness, injury, or “burnout”. MIND OVER MUSCLE shows you that regeneration can be achieved through deep relaxation, a time of total rest that maintains your equilibrium.

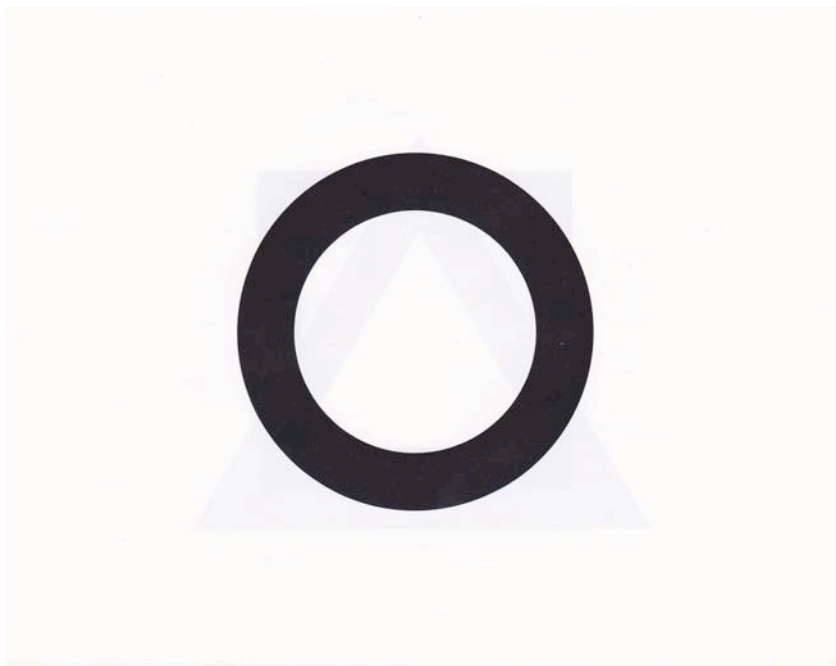
As you grow physically, and mentally, you challenge yourself, trying to achieve your personal best. When you invest your ego in your performance, worry about losing, fear a loss of face, prestige or money, you undermine yourself. In your quest for excellence, it is important that you retain the joy and spirit of play that you experienced as a child, when you played for its sake, i.e. as a joyful end in itself rather than merely as a means to a rewarding end or consequence.

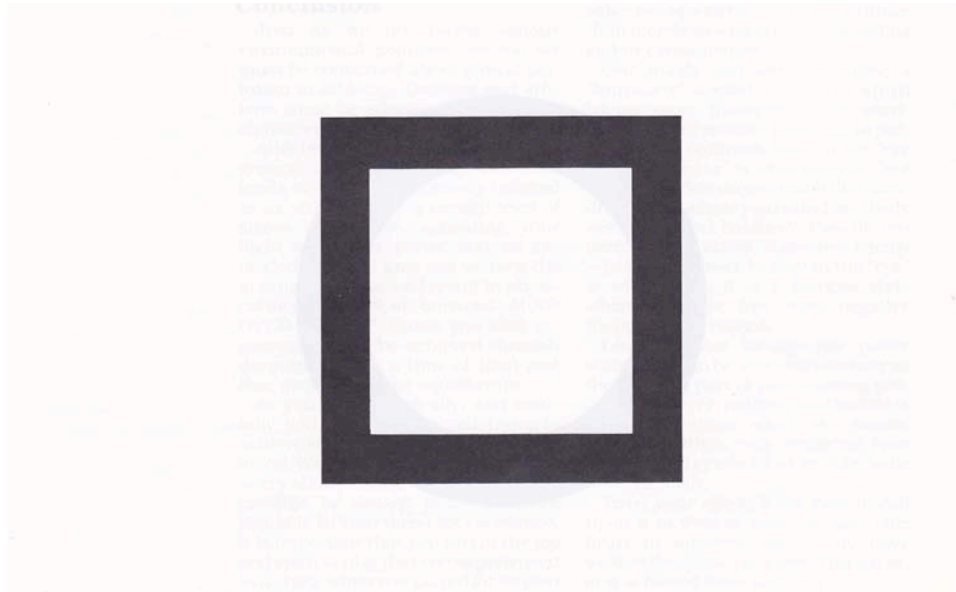
Our minds can often resemble a “hurricane”, a whirl of thoughts, often worrisome in their nature. Learning to perform at the optimum level, in the “eye of the hurricane” is what every athlete strives for. How do you reach that wondrous state where your mind and body work in perfect balance? How do you overcome the athlete’s greatest enemy – fear?

The power to play in the “eye” is within you, it is a fearless state where you are free from negative thoughts and visions.

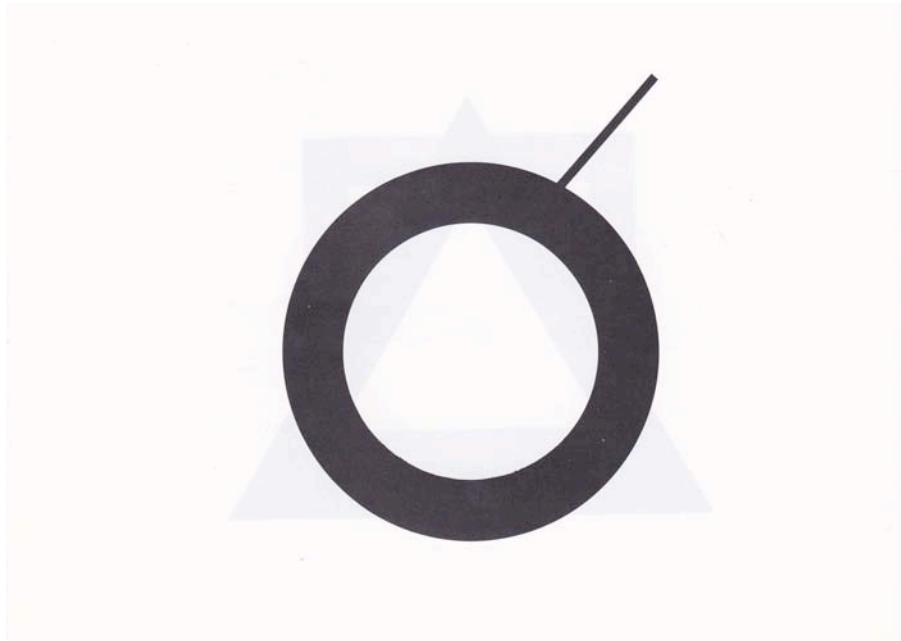
Learning how to tap the power within you can be as tough mentally as the physical part of your training program. However, nothing worthwhile is achieved without effort; the mental magic is within, only requiring your consent and gentle effort in order to be brought forth.

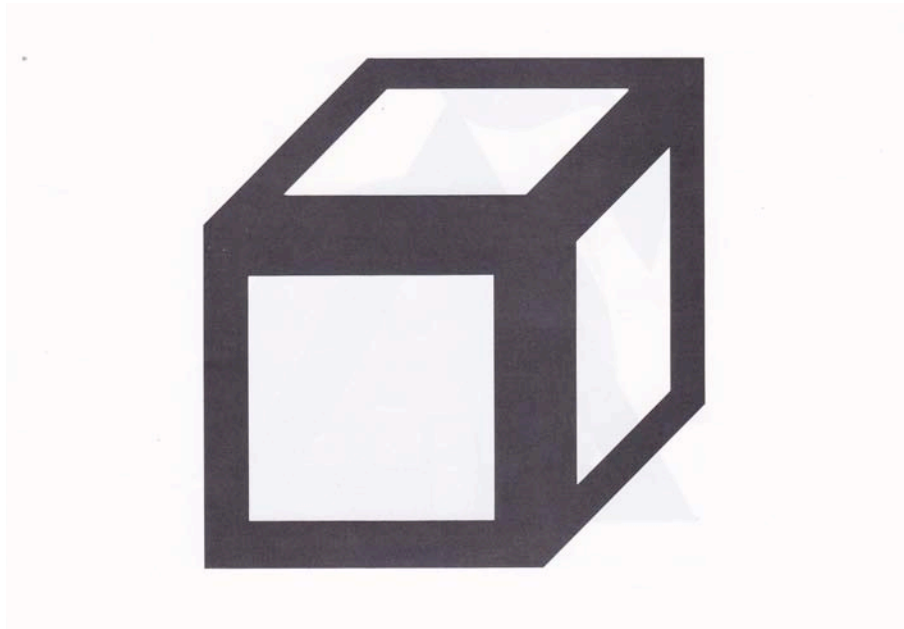
Trust your spirit, learn how to call upon it in time of adversity and take heart in knowing that many have walked this path, conquered their fear, and achieved their potential.



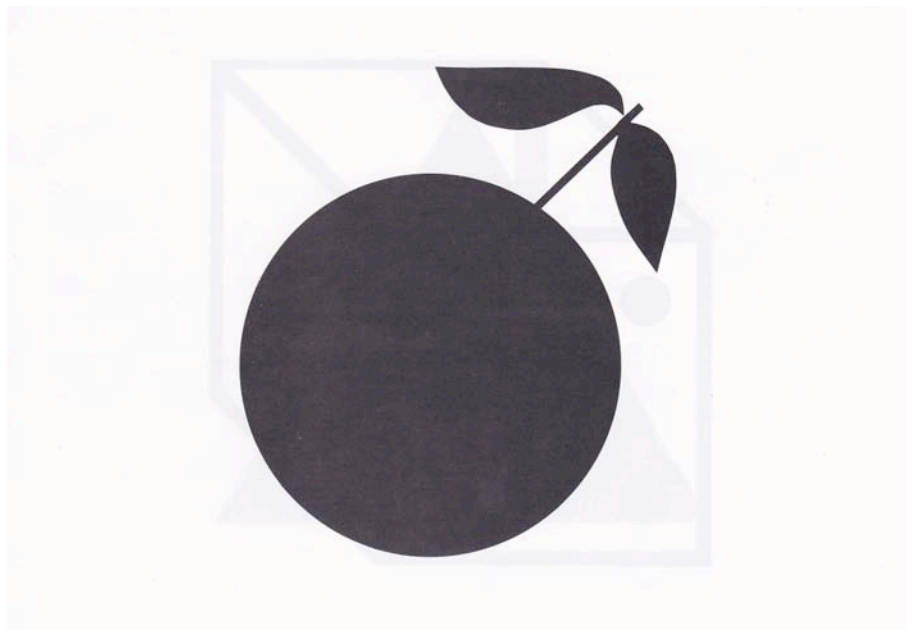


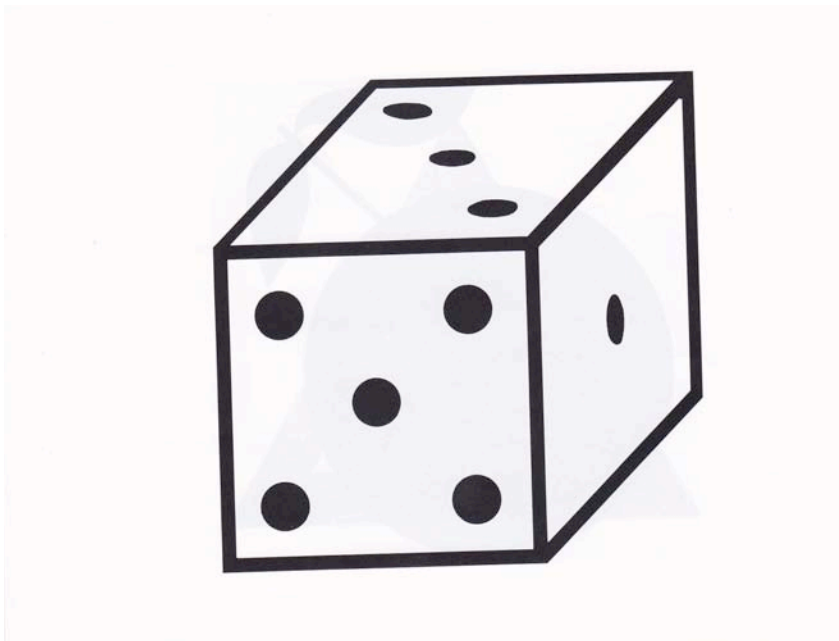


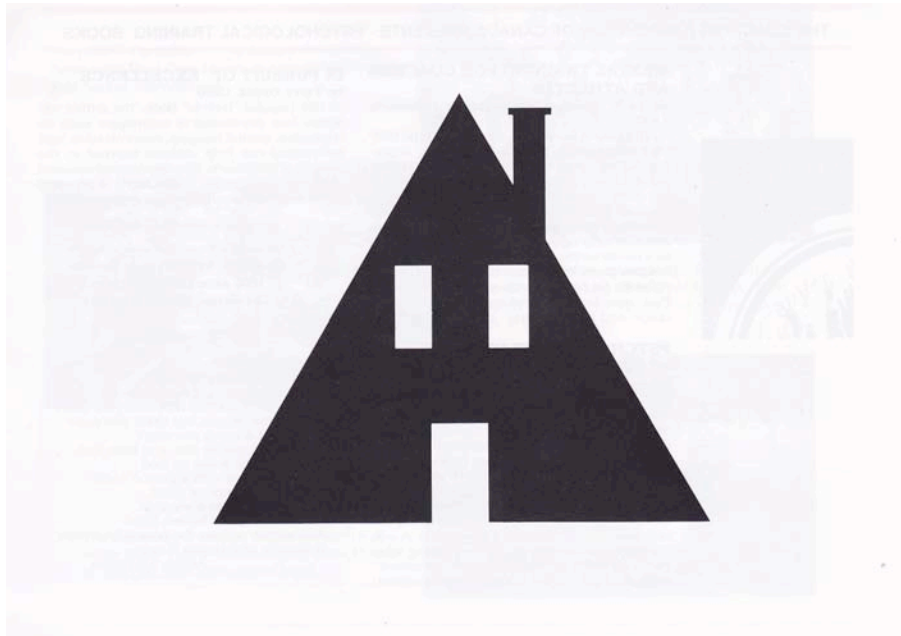


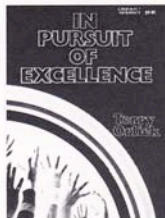












MENTAL TRAINING FOR COACHES AND ATHLETES

ed. by T. Orlick, J. Partington & J. Salmela 1982

A collection of the papers presented at the ISSP Fifth World Sport Psychology Congress. Representing the views of academicians and practitioners from a variety of countries, it is one of the best compendia of international Sport Psychology material ever assembled. The individual contributions in MENTAL TRAINING are aimed at helping people to direct their energies in a constructive, self-fulfilling way. The publication provides an array of useful psychological skills for both athletes and coaches - skills that can improve performance, self-acceptance, and interpersonal relationships.

PSYCHED - INNER VIEWS OF WINNING

ed. by Terry Orlick & John Partington 1986

PSYCHED is a compendium of recollections of successful Canadian Olympians, related to the authors in the course of a research project, designed to assess the implications of mental preparation for competition. It provides a rare insight into the inner life of sport, and should be of particular benefit to the next generation of high performance aspirants. Whatever your dreams might be, these stories will bring the realization of the dreams within easier reach. "To keep pushing through all the training, what works for me is setting small goals for myself." (Alex Bauman - 1984 Double Gold Medalist)

IN PURSUIT OF EXCELLENCE

by Terry Orlick 1980

In this popular "how-to" book, the author explains how psychological techniques such as relaxation, mental imagery, concentration, and self-control can help athletes succeed in the pursuit of excellence. The approaches outlined can help us all, attain higher levels of personal excellence and greater life satisfaction.

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Winners' Creed

If you think you are beaten, you are.
And if you think you dare not, you don't
If you'd like to win, but think you can't
It's almost a cinch you won't
If you think you've lost, you have lost
For out in the world we find
Success begins with a person's will
It's all in the state of mind.
Life's battles don't always go
to the stronger or fastest hand
And sooner or later the person who wins
is the one who thinks "I can".

Author Unknown

The Fitness Appraisal Kit

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Mind Over Muscle Program

Includes the GSR 2 biofeedback monitor and two cassettes. One cassette explains relaxation/visualization, the second features six leading sports psychologists plus this 48 page instruction manual. (T#2860)

Mind Over Muscle (Tapes and manual only)

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One cassette featuring six leading Sports Psychologists plus this 48 page Instruction Manual. (T#2874)



Carolyn Waldo
Double Olympic Gold Medalist



Sylvie Bernier
Olympic Gold Medalist

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