## Relaxation Techniques for Better Performance

by Dr. Betty Scott

#### Introduction

During the 1983 spring semester, Dr. Scott gave workshops at the Northern Illinois University (DeKalb), University of Iowa (Iowa City), University of Kansas (Lawrence), Arizona State University (Tempe), and the University of Missouri-Columbia. These workshops focused on relaxation techniques and the control of stage fright.

These workshops emerged as a result of previous studies and certifications with well-known hypnotists such as Barrie Konikov, Dick Sutphen, and Walter Sichort. Dr. Scott is a certified hypnotherapist. Dr. Scott is also a member of the World Congress of Professional Hypnotists, the International Guild of Relaxoligists, and the Guild of Ethical Hypnotists.

During this school year, Dr. Scott has given workshops at the following meetings: the 7th Annual Imagery Conference (San Francisco, October, 1983); the World Congress on Professional Hypnotists Convention (Las Vegas, December, 1983); the 1st Annual International Imagery Conference (Queenstown, New Zealand, December, 1983); and the Southwest Hypnosis Convention (Houston, February, 1984),

From August 1-16, 1983, Dr. Scott gave two workshops on Relaxation Techniques at the Classical Music Seminar in Eisenstadt, Austria. She also played in the Classical Music Seminar Orchestra while in Austria.

Nervousness... fear... stage fright. These emotions are the great levelers of even the best performers. I doubt if there's even one trumpeter who can say that he or she has never gotten nervous for a concert or a recital. The awful thing about nervousness is that it acts like an insidious disease in that a little bit of nervousness tends to balloon into substantially greater feelings of nervousness. When we continue to get nervous for those seemingly all-toocrucial concerts, we soon establish a conditioned response. In the vernacular, this means that we've established a habit (in this case, a negative habit). This habit of nervousness is triggered by specific situations most often associated with the trumpet. This in turn becomes a "Catch-22" situation in that the more we desire to perform well but fear or question our capacity to do so, the more we lead ourself toward greater feelings of anxiety and, hence, more fear. The more you think about it not happening, the worse it gets. Have you ever tried to convince yourself not to get nervous? Impossible! Truly, we draw to us the things that we think about—including the things we fear.

The reasons we get nervous and uptight are as varied as the individuals reading this article, but there are some common possibilities: lack of preparation-physically and mentally; playing for the wrong reasons—to impress someone or to "show off"; fear of looking and playing like a fool—especially to colleagues, auditioning committees, students, families and individuals who can raise our

salary; or fear of really showing yourself to othersbecause others might find out just how sensitive, gentle and fragile you really can be (conversely, your blustery nature might be discovered as a front for insecurity). Many of the reasons for our nervousness are directly related to our egos and how we view ourselves and our relationships with one another; how we view the game of life and trumpet playing. Again, our mental attitudes are reflected in our performance and our performance is reflected in our mental attitudes. Several good books have been written on this subject and are worthy of your time and money: Timothy Gallwey's Inner Game of Tennis, Eugen Herrigel's Zen in the Art of Archery, and Jane . Roberts' The Nature of Personal Reality.

Most of us know the classic symptoms of stage fright, either through our own experiences or in observing other performers or students. Who can forget the clammy hands, sweaty brow, cottony tongue, sagging (or too tight) muscles, shortness of breath or chops that feel like they had been playing for five hours instead of five minutes? Remember what it felt like to go into a concert or recital at least 98% prepared—only to play 75% (or less) of your capacity? And the awesome "domino" effect of one wrong execution triggering yet another wrong execution? Failure breeding failure? And remember the emotional responses during and after the poor performance? During the performance you wanted to slither off stage, dissolve into the floor or hide in your bell. After the performance came the feelings of worthlessness, depression, sadness, anger, loss of self-confidence and self-esteem. You wanted to avoid contact with everyone, and often did.

But wait! There's hope. Since we originally created these negative feelings and responses, we also have the capacity to create their opposites, namely, positive feelings and responses. What the mind can conceive and believe, it can achieve. One of the most difficult statements for most of us to grasp is that we create our reality and that we draw to us those things which we think about. Since we create positive as well as negative images, we can replace negative images and attitudes by learning, practicing and applying positive thoughts and actions. I won't deny that this takes practice (especially mental practice), but the rewards can benefit and permeate your entire life and being, not just your trumpet playing.

Not only does nervousness take its toll on our performances, it can, and usually does, affect every part of our lives. One of the greatest problems that individuals face is learning how to cope with stress. That we don't do a very good job of coping is evident in the high number of suicides, the large amount of drugs and alcohol consumed and in the tons of pain-killers and emotion suppressants ingested. Stress is evident in getting a job and keeping it, feeling secure in a job and making enough money to live a comfortable life. World politics and nuclear madness add to the stress.

The solution? Learn how to cope with stress and make it work for us. In order to be successful, everyone must find healthy ways to "beat the system" and cope with his/her job (or lack of) and with the stresses associated with everyday living. One of these ways involves the use of visualization and relaxation techniques. I will explain several of these techniques. They are basically simple and effective. If you follow the directions, you will get the results. First, I would suggest that you find a safe and comfortable (preferably quiet) place to do these exercises. This means that you will never do these exercises while driving a car or anytime when you need full consciousness. Second, repetition is the key to the continued effectiveness of these exercises, so I would suggest that you do one of the exercises at least once a day for the first three to four weeks. Then, in order to maintain your skill, practice three to four times weekly. Stated simply, the more you practice these exercises, the better you'll get. The skill will stay with you as long as it is reinforced occasionally, and greater depths of relaxation can be equated with physiological and psychological benefit.

## Relaxation Technique No. 1:

- 1. Be sure that you're in a safe and comfortable place. Just let your body relax. Now feel your body relax.
- 2. Take in a slow, deep breath through your nose, hold to the mental count of four, then slowly release the air through the mouth. Push the air all the way out and on the last push of air, think zero. Close your eyes. Do several more deep breaths in the manner just described.
- 3. Mentally count yourself down from seven to one, saying and thinking "deeper, deeper, down, down." Find some mental means of transportation that allows you to feel as if you are going deeper and down. Perhaps you might want to imagine you are descending into a deep lagoon. Or perhaps you would like to take an escalator or an elevator. Or maybe you would like to ride a magic carpet. Whatever you create will be right for you, but as you mentally count from seven to one, see and/or feel yourself going down.
  - 7 deeper, deeper down, down deeper, deeper down, down 5 deeper, deeper down, down 4 deeper, deeper down, down 3 deeper, deeper down, down 2 deeper, deeper down, down 1
- 4. You can stay in this place of relaxation as long as you wish, but when you wish to return to full waking consciousness, all you need to do is to count yourself up from one to five. With each count feel the blood going through your body and be aware of your heartbeat and your breathing. Notice how relaxed you are. With each ascending count, send good thoughts to your body and mind; e.g., "feeling good all over," "my mind is clear and alert," "my body is relaxed but

energized." On the count of five, say "eyes open, wide awake."

Now this is an important thing for you to know: should any emergency situation arise while you are in this fully relaxed state, you will automatically awaken and be in complete control and command of the situation.

### Relaxation Technique No. 2

Sections one and two are the same as Technique No. 1.

- 3. Mentally, say something similar to the following: "Feel the relaxing power come into your feet and toes... and then move on up your ankles... then feel the relaxing power move into your legs, just relaxing all the large and small muscles in your legs... now, feel the relaxing power move into your hip and pelvic area. Every part of your body becoming more and more relaxed... now feel the relaxing power move into your heart and chest area... and from there, the relaxing power moves into your shoulders, making your shoulders loose and limp, loose and limp... and now the relaxing power moves from the shoulders all the way down your arms—first the upper arms, then the forearms, then to the hands, all the way to the fingertips... now the relaxing power moves into your back and spine, relaxing all the large and small muscles of the back... and now the relaxing power moves into the back of the neck, and from the back of the neck, it moves to the back of the head. You might even feel a tingling in your scalp... and from the back of your head, the relaxing power moves over the top of your head and into your forehead... from there, the relaxing power moves into the muscles of the eyes and all the small muscles surrounding the eyes. Every part of your body relaxing more and more... and now the relaxing power moves into your cheek muscles... and now the relaxing power moves into your jaw area. Allow a little space between your teeth and relax your tongue... and now feel the relaxing power move into your throat area, all the muscles of the throat are very loose and limp. Every part of your body feeling so warm, so comfortable and so peaceful.
- 4. When you wish to come to full waking consciousness, count from one to five, giving yourself good and positive suggestions along the way, until you reach five when you say "eyes open, wide awake."

Should you wish to work on some specific problem, or to send healing messages to your body, make a "blueprint" or outline of what you want to work on before you go into relaxation. You can do this in the form of an "affirmation"; e.g., "my blood pressure is normal," "my head is clear," "my hearing improves daily," "my fingers and tongue are perfectly synchronized," "every day I become more alert and aware." Always word the affirmation in the present tense (you want the results now, not in some distant future). See and feel this already taking place. Then repeat the affirmation eight to ten times. Follow this with the slow, deep breathing exercise described in the second part of Relaxation Technique No. 1.

These exercises make use of the mind's incredible ability to use suggestions in a positive fashion. Tinkering with your psyche to bring about improved performance and greater relaxation is far preferable to using drugs such as valium and inderal. These drugs appear to be the musician's panacea, but the results are inconsistent from individual to individual. Besides, most of us would feel better if we dropped our dependency on chemical substitutes. The solutions to our problems reside within us.

For the sports buffs reading this, you will find the following statistics fascinating. In the 1972 Olympics, the United States won many gold medals. Frank Shorter won the marathon and among the women swimmers, there were six individual gold medals and two gold relay medals. In the 1976 Olympics, Frank Shorter ran second behind an East German and the East German swimmers won ten individual gold medals and one gold relay medal. By contrast, the United States won only one single gold medal. One of the reasons? The East Germans, not content to rely upon physical training only, also included visualization exercises, relaxation studies, and hypnosis as a part of their total regime.

One more example of the mind's incredible capacity is illustrated in a series of tests conducted at the University of Chicago: "...tests show how our subconscious computer actually creates the reality for which it is programmed. Three test groups of students took part in a mental programming experiment based upon shooting basketball. All the participating students were asked for their individual basket-shooting ability, and the results were recorded.

"Group one was told: 'Don't play any basketball for a month. In fact, just forget about basketball for the entire month.'

"Group two was told: 'You are each to practice shooting baskets for one full hour a day, every day for a month.'

"Group three was told: 'You are to spend one hour a day imagining you are successfully shooting baskets. Do this every day for a month. Fantasize or imagine yourself as being successful shooting baskets. See every detail of your accomplishments in your mind.'

"One month later, the three groups were again tested for their abilities to shoot baskets. The students in Group One... tested exactly the same as they did the first time. Those in Group Two... tested 24% improved in their actual basket-shooting ability. The Group Three students... tested 23% improved in their actual basket-shooting ability. Only one percentage point less than the group that had actually been practicing." (Dick Sutphen, Unseen Influences, pp. 92-93.)

Would you care to imagine how much improvement would take place if you combined practice with visualization? The results could be phenomenal. The techniques, described in this article are the foundation upon which you can build positive changes in your perspective and performance.

For those of you desiring a more "in-depth" approach to relaxation, I suggest you order Cassette No. 1: "Relaxation." This cassette and Cassette No. 2: "Being a High-Level Performer (Brass)" are available from the author at \$10.00 each.

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# Beta Blockade and Stage Fright, Looking Back

by Thomas A. Brantigan, DMA and Charles O. Brantigan, MD

October 21, 1978 marked the first time we published findings from our research on the use of beta blockade in the treatment of stage fright. The article was published in Lancet, a well-known British medical journal. At the time, music and medical editors of many journals had severe cases of stage fright over publishing such findings. Treatment of such a personal problem as stage fright with "drugs" was somehow taboo. Since that time the concept has been well accepted and the drugs, in our opinion, have become widely abused.

Everyone has an opinion about stage fright. Many of these opinions are held with almost religious fervor. Because it is such an emotionally charged subject, we have taken great pains to see that all of our studies have been scientific and rigidly controlled. Statements that we have made in the lay press are all substantiated by studies, most recently reported in the January 1982 American Journal of Medicine, where details are subject to close scrutiny. Similar controlled studies have been carried out by Dr. Ian James of the Royal Free Hospital in London, and Dr. James shares our opinions on the use and abuse of these drugs. The use of beta blockade is now widely enough known that it has been reviewed in radio talk shows, serious medical journals, and even Playboy

Some people were scared of tampering with creativity, i.e., "Stage fright makes us better musicians!" or "Nervousness makes us play better." Others feared that those who would stoop low enough to take drugs might gain some advantage over those more honorable souls who did not. Many physicians refused to accept stage fright as a problem and couldn't understand why anyone would want to treat such an insignificant annoyance with such a powerful drug. A great deal of public skepticism and criticism was met with an equal amount of private experimentation and quiet consistent adoption and use of the medications by professional performers and even by physicians speaking before medical meetings.

Unfortunately, with acceptance came inevitable abuse. These drugs are, after all, among the most prescribed heart medications in the United States and are thus easily available.

When Dr. Leon J. Whitsell, Medical Editor of the ITG Journal, asked us to write another article describing not the research and benefits to be derived, but rather the dangers involved in use of beta blockade, we felt a little awkward. After fighting the battle for acceptance, it was difficult to take the role of the antagonist. It was a bit like asking Lee Iaococa to write about injuries sustained while abusing Chrysler automobiles. What could he say other than, "Don't abuse my cars." What can we say but, "Don't abuse our research." On the other hand, it is important for those of us who have defined the indications for beta blockade to also define when the drugs are not indicated, not helpful, or even dangerous.

Although members of our profession have a clear need to control stage fright, there is an even greater need for understanding of how drugs work and how they should be used. Our goal in this discussion is to describe the biology of stage fright, comment on side effects and other acute problems associated with beta blocking drugs, discuss possible long term effects, and then summarize our opinion of how these drugs should be used.

Although there may be dozens of reasons for stage fright, some controllable and others not, we arbitrarily divide them into two groups. If a performer has not adequately prepared for his performance, he will be frightened for good reason. Guilt and fear are not all without cause! This is "adaptive anxiety," and is one of the body's important defense mechanisms. No treatment is indicated other than careful study, good preparation and avoidance of situations beyond the performer's facility on his instrument.

If, on the other hand, there is no apparent reason for the physical reactions, and these reactions cause disability, we call it "morbid anxiety." There may be a chemical, psychological, or even genetic reason for the reactions, and treatment may be appropriate. The cause may be something for which the performer cannot be directly blamed.

Morbid anxiety has a psychological and a physical component. Although they overlap, one component usually predominates. Our studies indicate that in the professional musician the physical component is usually fundamental and psychological problems are a secondary result of the physical problems. Furthermore, the stage fright response is a learned response.

Musicians have been conditioned to be nervous in performance either through their professional training or through their general life experiences. Conservatory training, when it emphasizes poorly prepared trial performances before overcritical juries, appears to be one of the most potent contributing factors. Once physical reactions appear, the performer associates them with performance, and every time one appears, the other surely follows. When the physical reactions to the performance situation begin, those symptoms have the tendency to snowball. Preparation and creative ability no longer matter. Fear begets fear. One memory slip in the first piece on the program may result in destruction of the entire concert.

These physical reactions have a chemical basis. Stage fright is nothing but the "fight or flight reaction." The body reacts to a perceived threat with an outpouring of adrenalin. This prepares it for a supreme physical effort. This reaction is useful in dealing with the town bully or a saber tooth tiger, but interferes with the fine psychomotor coordination required for a good musical performance. It is a mass action response. The adrenalin acts on beta receptors to cause this effect. Interestingly enough, current research indicates that people have differing numbers of beta receptors in their bodies, and, as a result, may have a different magnitude of response to the same amount of adrenalin. Some peole also have natural circulating beta blocking substances and thus react differently to the same chemical stimulus.

Beta blocking drugs have been so successful in the treatment of stage fright because they block the effect of adrenalin on the beta receptors. Since the effect takes place outside of the central nervous system, no slowing of mental processes is produced and no interference with psychomotor coordination occurs. Furthermore, the mental excitement of public performance, which adds brilliance to a performance, is preserved. This is a quite different effect from that provided by tranquilizers that cause a feeling of well-being but which damage the performance.

From this discussion, it should be obvious that beta blocking drugs are useful only in treating the physical component of stage fright, and performers whose anxiety is secondary to an underlying psychological problem are less likely to benefit.

The ethical considerations surrounding the use of drugs in performance are complicated, and largely beyond the scope of this discussion. However, any such considerations must be based on an objective understanding of the nature of the problem.

Stage fright is a physical problem that is treatable like any other physical problem. We would not hesitate to give the performer the same drug to treat his high blood pressure, so why shouldn't we give it to him to treat his stage fright? The stage fright may, in fact, be the most important underlying cause of his high blood pressure.

It is also clear that due to differences in numbers and distribution of beta receptors, different people react differently to the stress of performance entirely due to the make-up of their bodies. Perhaps in these people beta blocking drugs do not produce a competitive advantage, but simply make them more physiologically similar to their competitors.

Finally, the performance of music is usually not a competition between superhuman athletes to see who is best. Musical performance is a sensitive performer sharing his talent with the audience. The performer is not as important to the audience as the beautiful music he creates. The audience needs to be sensitive to the product rather than whether the performer took a medicine.

Remembering that beta blocking drugs exert their effects on stage fright by blocking the effect of adrenalin, it is not surprising that beta blockers are dangerous to certain people.

As we travel and talk to musicians in various school and professional orchestras, we are astounded by the number of people taking significant quantities of beta blockers over long periods of time, and worse, passing them around to other friends who think they will benefit from the drug. The two problems, uncontrolled use and overuse, need to be addressed. There are potentially acute and long-term problems associated with the use of these drugs. These drugs require a prescription for a reason.

Although Inderal, the leading beta blocking drug in the United States, has a long history of safety and freedom from side effects, there have been occasional serious problems. These problems may be life threatening for some people. There have been occasional reports of hallucinations and severe psychiatric disturbances from Inderal. These are unusual idiosyncratic reactions that should not occur from some of the other beta blocking drugs which do not enter the brain. They are true side effects.

In contrast, ill effects more commonly occur to people who depend on their sympathetic nervous systems or body's adrenalin for everyday function. Asthmatics, for example, may depend on their sympathetic nervous systems in order to breathe. In such patients, blockade of the sympathetic nervous system may provoke an attack. "Selective" beta blocking drugs have been created that have less effect on the lungs, but they still may have some effect. Some patients with heart disease have problems with the electrical system of their hearts. Beta blocking drugs may cause their hearts to stop.

In insulin-requiring diabetics, beta blocking drugs may mask an insulin reaction, and may lead to death. Asthma attacks, heart stoppages, and sudden death from insulin reactions are serious, but they are not true side effects. They are the result of predictable properties of the drug and are the main reason why the use of these drugs must be controlled by a physician. It is the role of the physician to see that none of these people receive these drugs. In most people, occasional small doses of these drugs are as safe as aspirin.

Except in the above circumstances, occasional use of Inderal is unlikely to cause any serious difficulty. Continuous use or overuse may cause significant problems. During continuous use, the body becomes accustomed to the presence of the drug. Sudden withdrawal can cause serious consequences.

One of the prime uses of beta blockade is to decrease the heart's demand for oxygen in patients with deficient blood supply to the heart. If the person has asymptomatic heart disease, which then progresses, as it commonly does, and he stops taking beta blocking drugs, suddenly he is in an embarrassing position. His heart requires more blood supply, and he is unable to provide it because the disease has progressed. A heart attack may result. This problem is compounded by the body's transient hypersensitivity to adrenalin after withdrawal from these drugs.

The human body has an interesting physical reaction to the presence of stress and fear, adrenalin, or beta blocking drugs. The body reacts to continuous stress or continuous adrenalin by lessening the concentration of beta sympathetic receptor sites. In other words, people exposed to constant doses of adrenalin will ultimately become less sensitive to it. When the exposure ceases, the concentration of receptor sites returns to normal. Before you use this fact to support the old desensitization theory, note that this decrease does not occur with multiple short doses of stimulants and has the nasty habit of being combined with adverse conditioning.

The reverse is true about the lack of catecholamines, or in this case, the presence of beta blockers. Chronic use of beta blockers increases the number of active beta adrenergic receptors. Hypersensitivity to adrenalin can develop such that an increased sense of nervousness can occur with the withdrawal of beta blockade. Thus, taking too much too often will result in a worsening of the stress problem when stopping the drug.

In addition to physical problems, there are even a few horror stories of people with severe psychological reactions to continuous use of Inderal. Dr. R. Fleminger of St. George Hospital, London, described visual hallucinations and illusions in some patients taking 200 mg of propranolol daily. Inderal "blahs" or depression, lack of sexual drive, and other problems can occur with continuous use of the drug. With the introduction of drugs such as timolol, which do not get into the brain, such reactions should not occur.

Although beta blocking drugs can be of inestimable value to the performer beset by stage fright, there is a serious need to weigh potential risks against the known benefits. Although beta blockade will not make someone a better musician, it has been proven that individual performances themselves often improve. In musicians disabled by stage fright, these medicines allow the performer to share his ability with the audience. It would seem, in the words of an editorial in the Medical Journal of Australia, that beta blockade can allow one to play "beta than his best."

Look for a moment at guidelines for the appropriate use of beta blockade in stage fright. Beta blocking drugs are potent drugs that should be administered only by physicians who can screen out those who would be harmed by them.

These drugs should never be passed from musician to

musician just to "try them out" prior to getting a prescription of their own. It is very easy to succumb to the temptation to do this and difficult for the person asking to understand why such a request must be refused.

The smallest dose that will lower the heart rate slightly is enough to achieve the desired effect. In our experience this has never been higher than 40 mg of Inderal or its equivalent with other such drugs. More will serve no benefit to the stage fright problem but will have greater potential for physical difficulty.

Beta blockade is effective for situational stress manifested by physical symptoms, and much less appropriate for continual stress manifested by psychological symptoms. It is appropriate for occasional use for major performance, but not continuous use for lessons, rehearsals, or non-stressful performance. Beta blockers are not tranquilizers and should not be used as such.

Beta blockers should be viewed as an educational tool to teach the performer that it is unnecessary to be intimidated by audiences and by the performance itself. Psychological stress management techniques should be combined with drug therapy. Many musicians have found that once they have experienced performance without fear, they can then build the self-confidence necessary to perform well without the drug. This will never happen without the conscious goal in mind to do so.

It has always been our intention that beta blockade be used primarily within an educational setting as part of a concerted training effort to eliminate people's stage fright. We have yet to see this happen and look forward to the university or conservatory with the foresight to begin such a project.