

Meditation for the Martial Artist

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This essay aim's to investigate the possible benefits of meditation in the context of improving the mental and physical balance of a Taekwon-Do practitioner.

Since time began, man has used mental relaxation to enhance the physical state. Eastern cultures have practiced Contemplation or Meditation for thousands of years. In the 1960's meditation became "fashionable" to Western cultures, most notable, when the Beatles travelled to India to meet with the Maharishi Mahesh Yogi to learn about Transcendental Meditation. In modern times the medical community has invested money and resources to study the physiological effects of meditation, and there is a growing movement in mainstream science to fund research in this area with the establishment of five research centres by the National Institute of Health in the U.S. A. to research the mind-body aspects of self healing and disease prevention through stress relief.

It is of course of the utmost importance to instil a sense of balance in martial arts students. However, Taekwon-Do, unlike some martial arts, does not seem to promote the need for mental and physical relaxation as part of the training routine.

Students of Shotokan Karate are taught (from day one) to relax at the end of a class. This is done as part of the formal closing of a training session when student adopt a kneeling position called seiza and they close their eyes and breath slowly using a technique called mokuso. The objective is to relax and calm the students by quieting the mind and focusing the attention on the inner self. What takes place is a basic form of meditation. This also tends to help with sleeping after training, as the brain tends to be very active after intense physical activity has taken place.

When we are preparing ourselves for competition, or getting ready for a big job interview, we may take a few moments to calm ourselves down and focus on the task ahead by closing our eyes for a few moments, taking a few relaxed breaths and shutting out the "grey noise" around at the time. In doing so we are starting to perform a self-relaxation exercise, which is the basis of all meditation.

It would be reasonable to assume that most of us have done this at some time or the other, but no long-term benefit is achieved. One of the objectives of this essay is to provide information on scientific studies relating to Mindfulness Meditation (as defined) and some guidance in performing relaxation techniques that will have a direct impact on the physical and mental state, also how to gain the most from these practices and achieve long term benefits.

You will be asking, "How am I qualified to do this". Well, I have practiced Transcendental Meditation since the early 1980's and have experienced the benefits first hand. I can also advise that a vast amount of information available on the web, which relates to the subject, is inaccurate and misleading. However, there are those sites that are very good and honestly informative.

What Is Meditation And How Does It Work?

Before we look at relaxation techniques, I would like to present some of the information from the thousands of scientific studies I have investigated. Most of the terminology in these scientific papers is difficult for the layman to understand (myself most especially included) so I have taken this information and tried to break it down into a simplified version of the facts.

Mindfulness meditation and related techniques are intended to train attention for the sake of provoking insight. Think of it as the opposite of attention deficit disorder. A wider, more flexible attention span makes it easier to be aware of a situation, easier to be objective in emotionally or morally difficult situations, and easier to achieve a state of responsive, creative awareness or “flow”.

One theory, presented by Daniel Goleman & Tara Bennett-Goleman (2001), suggests that meditation works because of the relationship between the amygdala and the prefrontal cortex. In very simple terms, the amygdala is the part of the brain that decides if we should get angry or anxious (among other things), and the pre-frontal cortex is the part that makes us stop and think about things (it is also known as the inhibitory centre).

So, the prefrontal cortex is very good at analysing and planning, but it takes a long time to make decisions. The amygdala, on the other hand, is simpler (and older in evolutionary terms). It makes rapid judgements about a situation and has a powerful effect on our emotions and behaviour, linked to survival needs. For example, if a human sees a lion leaping out at them, the amygdala will trigger a fight or flight response long before the prefrontal cortex knows what's happening.

But in making snap judgments, our amygdala is prone to error, seeing danger where there is none. This is particularly true in contemporary society where social conflicts are far more common than encounters with predators, and a basically harmless but emotionally charged situation can trigger uncontrollable fear or anger — leading to conflict, anxiety, and stress.

Because there is roughly a quarter of a second gap between the times an event occurs, and the time it takes the amygdala to react, a skilled meditator may be able to intervene before a fight or flight response takes over, and perhaps even redirect it into more constructive or positive outcome.

The different roles of the amygdala and prefrontal cortex can be easily observed under the influence of various drugs. Alcohol depresses the brain generally, but the sophisticated prefrontal cortex is more affected than less complex areas, resulting in lowered inhibitions, decreased attention span, and increased influence of emotions over behaviour.

Some studies of meditation have linked the practice to increased activity in the left prefrontal cortex, which is associated with concentration, planning, meta-cognition (thinking about thinking), and with positive affect (good feelings). There are similar studies linking depression and anxiety with decreased activity in the same region, and/or with dominant activity in the right prefrontal cortex. Meditation increases activity in the left prefrontal cortex, and the changes are stable over time — even if you stop meditating for a while, the effect lingers.

Electroencephalographs (EEG) recordings of skilled meditators showed gamma wave activity that gradually expanded across the brain during meditation. Gamma waves indicate synchrony between sections of the brain. These meditators had 10 to 40 years of training in Buddhist-based mental training. EEGs done on meditators who had received recent training turned up considerably less synchrony.

The experienced meditators also showed increased gamma activity while at rest and not meditating. The results of the study do not make clear whether meditation training creates this activity or if individuals with high gamma activity are attracted to meditation. (Antoine Lutz & Richard J. Davidson, 2004).

Meditation also effects brain wave production as measured by an EEG machine. While the brain at a waking state is primarily in the Beta range of frequencies (14-21 cycles per second), while under meditation the brain tends to slow down the Alpha range (7 - 14 cycles per second). One of the first Americans to study the effects of meditation on brainwave production was José Silva who founded the Silva Method. Silva theorized that meditation; in addition to stress relief could also be used for enhancing creativity and developing intuition.

Dr. James Austin, a neurophysiologist at the University of Colorado, reported that Zen meditation rewires the circuitry of the brain in his landmark book *Zen and the Brain* (Austin, 1999). This has been confirmed using sophisticated imaging techniques, which examine the electrical activity of the brain.

Dr. Herbert Benson of the Mind-Body Medical Institute, which is affiliated with Harvard and several Boston hospitals, reports that meditation induces a host of biochemical and physical changes in the body collectively referred to as the “relaxation response” (Lazar et.al, 2003). The relaxation response includes changes in metabolism, heart rate, respiration, blood pressure and brain chemistry. Benson and his team have also done clinical studies at Buddhist monasteries in the Himalayan Mountains.

IS MEDITATION PRAYER?

When people hear word meditation most of them consider meditation as a form of worship or prayer. But they could not be more wrong. The word meditation takes its roots in two Latin words: *meditari* (to think) and *mederi* (to heal). Meditation could be defined as a self-directed practice for relaxing the body and the mind. But we could say that it works with the mind and has its effects on both, body and mind. The purpose of meditation is to make our bodies transcend the real world and connect with the non-physical world. That is possible when all the activity of the mind is reduced. And what you should definitely memorize is the sentence that meditation is a state of awareness”.

Most meditative techniques originally have come from the East through eastern religions. Meditation is mostly practiced in religions from India, China and Japan, but you could find some kind of meditation in many different religions throughout the world. In the beginning, the purpose of meditation was mostly religious but when people noticed benefits to health and reducing stress levels it also became a non- religious matter.

The first thing you should know when talking about how meditation works is the fact that meditation works differently with each individual. Generally we could say that meditation is like resting. When you work hard physically your body needs to take a break. The same thing is true of the mind. During the day your mind is receiving different kind of information like smells, sounds, feelings and it is more than obvious that it needs to get some rest. Sleep can rest your mind and its main goal is to do that. But sometimes we are so stressed that our mind cannot completely rest even when sleep. That is when meditation can help. Meditation is going right into the difficult, stressed or unpleasant mind areas and it's not trying to find solution to these problems but to change the attitude to them. People who practice meditation have the fall in metabolic rate right after they start meditation. Proof for this is a huge drop in level of oxygen used; this oxygen consumption can fall up to twenty percent below normal. These people take one-litre air less in one minute and their heartbeats are less than normal. Blood pressure is also lower. Meditation also decreases nervous system activity.

The thing you will most notice after you have been doing meditation for a while (like at least a few weeks or months) is a more stable, calmer mind. Because the basic technique is staying with just one mental object (the breath for example) this is what you learn how to do. If you are doing a maths problem you will find you can 'just do that'. The mind is able to focus and stay where you want it to be, it's not jumping about, getting distracted all the time. It is a lot more content to just be with the way things are.

Another result is clarity of mind; the mind is clear and uncluttered. Like cleaning a window - the mind is our window on the world'. Notice the difference when you look out on a sunny day. It is hard to see anything clearly through a dirty window everything looks a bit blurred. With a clean window all the objects are sharp and clear - life looks crisp.

Calmness and clarity are the social or psychological results of meditation. In relation to the religious or spiritual aspect, the (ultimate) result is a profound insight into the nature of all things. This is the transcendence of ignorance, knowledge of truth, the end of stress and selfishness - this is enlightenment. Pretty amazing? Like with most things it is good just to start at the beginning. I reckon that anything that naturally increases, clarity and personal well-being, however small, has to be worth a try.

Meditation / Relaxation for Athletes

Relaxation is of great importance to any athlete striving for peak performance. Relaxation skills can help athletes reduce mental (self-doubts, worry, etc.) and physical anxiety (nausea, shaking, etc.), while increasing concentration and performance. Relaxation techniques can be used prior to competition or, if practiced enough, during competition. There are many techniques for keeping cool prior to and during competition.

Breath controlled relaxation is a technique that requires practice to learn properly. It can help with both mental and physical anxiety. Begin by practicing once a day. Assume a comfortable sitting position in a quiet place that is free from distractions. Check the time on your wrist watch or wall clock and make a mental note of the time you want to stop meditating (It is not advisable to meditate for more than 20 minutes at a time) Practice involves five steps and takes approximately

17-20 minutes to complete the entire technique and is best practice before eating. The five steps include:

1. Close your eyes and focus on your breathing. For the next 2-3 minutes, remain focused on the rise and fall of your chest. Notice that your breathing is calm and steady.
2. Next, focus your attention on the sound of your breathing. As you relax more your breathing will get louder. Keep it calm and steady for 2-3 minutes. Be sure to stay relaxed as you listen to your breathing. You may be distracted by sounds or movement around you, if this happens just bring your attention back to your breathing slowly and calmly.
3. Now allow your chest muscles to relax every time you exhale. Also, allow your chest muscles to fall deeper and deeper within you on each exhalation. Remember to keep your breathing calm and steady. Continue to relax in this manner for 3-4 minutes.
4. With your chest muscles completely relaxed and resting deep within you, listen to your breathing. Now continue to relax the rest of your body for approximately 10 minutes.
5. When you feel that 17 — 20 minutes have passed slowly open your eyes, just a little, and check the time. If you have a few minutes to go just relax, closed your eyes and continue the breathing exercise. If you have reached the end of the 20-minute period, close your eyes again but stop focusing on your breathing and focus your attention on the every day noises around you and your conscious thoughts. Then after about 2 minutes slowly open your eyes.

You should then take a moment to stretch, wake up and carry on with your daily routine. It is not advisable to launch into strenuous physical exercise directly after meditating. You will note that I advised not to continue the technique for more than 20 minutes. This is because you will tend to fall into a very deep state of relaxation and even fall into a deep sleep. Once you have practiced the technique for a while you will find that it is easy to meditate while travelling on a plane or as a passenger in a car. Once you are comfortable with the technique you can increase the sessions to twice a day, say morning and early evening. Don't exceed two sessions per day as it will have a similar effect to having too much sleep and you will not benefit from the exercise.

Breath controlled relaxation obviously takes some time to learn, but with practice, one deep breath during competition will trigger the relaxed feeling. It is a great way to relax and refocus during downtime in sport, an example would be during rounds in a sparring match or before you go on the mat for patterns.

Mantra meditation is more widely used in Buddhist meditation and Transcendental meditation (TM). It is a method that can also help athletes who have high levels of mental anxiety. The method used is very similar to the Breath Controlled Relaxation. However, to learn these techniques it is advisable to visit a trained meditation teacher. Visit www.tm.co.nz for more details.

The key to any relaxation technique is practice. Each technique will take several weeks of practice before an athlete will be able to achieve a beneficial level of control prior to and during competition. However, the benefits realized from being able to relax justify the time spent.

Interesting point

In Taekwon-Do we state in the student oath that we will “Create a more peaceful world”. A key statement on the Transcendental Meditation web site states “Transcendental Meditation is your key to clearer thinking, better health, fulfilling relationships and a peaceful world”.

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