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Name: Chris Ivanoff

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School: Lone Wolf Taekwondo, Powell, Wyoming

Club: Lone Wolf Taekwondo

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## **MANAGING YOUR FIGHT OR FLIGHT SYNDROME**

Having been employed with a Law Enforcement agency in Wyoming as a Park County Deputy Sheriff for more than ten years, I have had many opportunities to experience my own fight or flight syndrome. I have felt this feeling many times throughout the past in a number of situations including felony arrests, prowler calls, felony traffic stops, no knock search warrants, and simply dealing with subjects who are either intoxicated, under the influence of illegal drug usage such as methamphetamine, or suicidal subjects. This feeling can and will be experienced during any time your sidearm comes out of the holster or prior to engaging hands on physical confrontation.

Fight or flight Syndrome will be a very uncomfortable feeling for yourself prior to your actions being deployed. Depending on the situation, it can last a split second or as long as it takes to make a calculated decision. Whether or not you

have assistance of others nearby, I can assure you; this feeling will feel like an eternity.

Every person experiences this feeling from time to time. It isn't only during a hand-to-hand combat or self-defense situation. It can merely be felt when you are walking down the sidewalk, in the darkness, and you notice two men who are walking towards you that appear to be out of the ordinary. As the men approach you, your hands become clammy, your heartbeat increases and your stomach begins to tighten up. Having martial arts experience, you look your potential opponents in the face. Your opponents see that you are not an easy victim and decide to choose another over you. Your opponents then walk away from you. What you felt mentally is commonly known as the fight or flight syndrome. You can most likely remember getting scolded from your parents when you were younger and the feeling it left in your stomach. Or even in another instance, you may have felt it when you were asked to go to your supervisor's office and you didn't have a clue why you were being asked. Waiting to find out the reason your supervisor has requested your presence is simply gut wrenching, until you find out that it is only for a promotion or some other reasonable request.

Most martial artist's competitors feel various levels of fight or flight syndrome prior to entering the ring to spar against the other competitor. In National and International competition, where knock out techniques are considered an easy way for athletes to end the match quickly and thus save their own energy for future bouts, flight or flight syndrome may be felt more intensely for unspecified durations of time. Even if you are not a national competitor and just a martial arts student who practices a few nights a week, sparring against other students who are much larger or more experienced, can bring on emotions that trigger the fight or flight response. Since competition is not a life or death situation, the fight or flight feeling may not be fully engaged. However, by competing regularly, a competitor builds the confidence needed to control his/or her emotions. You don't have to necessarily be a dedicated martial arts competitor to experience fight or flight syndrome. It may be very well that you are a beginner or intermediate martial artist and it is requested by your master instructor that you spar with another martial artists who has considerably more experience than you do. Even though this sparring may be no contact, you may still have a tendency to have an elevated stress level.

When I am instructing sparring during practice, I have observed that students who are of all ranks generally revert back to using their basic lower level techniques when they are challenged by a more aggressive or experienced sparring partner. This is once again most likely due to their stress levels increasing and their inability to react to using their more advanced techniques. When those students are sparring a lower belt with less experience, they tend to use more challenging techniques.

**A more comprehensive understanding of fight or flight syndrome is as follows:**

Fight or flight responses, also called acute stress responses were first described by the great Harvard Professor Walter Cannon in 1927. His theory states that animals react to threats with a general discharge of the sympathetic nervous system, priming the animal for fight or fleeing.

## **BIOLOGY OF THE STRESS RESPONSE**

Normally, when a person is in a serene unstimulated state, the firing of neurons in the locus ceruleus is minimal. When danger is perceived, it is relayed from the sensory cortex of the brain through the thalamus to the brain stem. The route of signaling increases the rate of noradrenergic activity in the locus ceruleus, and the person becomes alert and tentative to the environment. Similarly, an abundance of catecholamines at neuroreceptor sites facilitates reliance on spontaneous or intuitive behaviors often related to combat or escape.

If the stimulus is perceived as a threat, a more intense and prolonged discharge of the locus cereleus activates the sympathetic division of the autonomic nervous system. (Wikipedia, 2007).

Listed below are ways of combating and managing your acute stress syndrome:

- Be in excellent physical and mental shape
- Recognize the threat
- Accept the threat
- Recognize your acute stress symptoms
- Begin to manage your breathing patterns
- Create a plan whether it is fight or flight
  - Perceive the problem
  - Evaluate the problem
  - Recognize the threat
  - Select a response
  - Initiate the response

### **# 1 - Be in excellent physical and mentally shape**

No matter if you are a white belt or an upper black belt dan in martial arts, it is imperative that you stay in excellent physical shape at all times. By being in excellent physical shape, your would be attacker will observe that you are not an easy target by simply how healthy and fit you appear to be from an observational standpoint. Therefore, it's paramount you train and exercise regularly. I remember many times when Dr. Ken Min, Technical Director of U. C. Martial Arts Program said, "A healthy body creates a healthy mind." With that said, you have to continue your training on a regular basis especially after you have gained the status of 1<sup>st</sup> Dan black belt. Passing your 1<sup>st</sup> Dan black belt

means skilful beginner, you are now considered worthy of relearning everything in a more skilful manner. Staying in excellent physical shape prior to a physical confrontation could assist you in creating additional time for you to respond with the correct action.

Now is the time to change the way you are thinking! One of the best ways to prepare for a split second hand to hand confrontation is to be proactive “when / then” thinking (Klugiewicz, 2002). This a term used by nationally known officer survival instructor Bob “Coach” Lindsey. This replaces the old “if / then” thinking. “If / then” thinking does not make a threat immediate enough. It places the threat too far in the distance. Just remember, every person becomes a victim at least once in their lives. Decide right now, that becoming a victim will occur and you may have to use your skills to survive the situation. Since most attacks are over with within zero to three minutes of the initial confrontation, you will have to use good judgment quickly. Depending on the severity of the situation at hand, if the circumstance requires action, take action instinctively and without hesitation.

## **# 2 - RECOGNIZE THE THREAT**

If you’re lucky, you will have time to recognize your threat. The attacker will preface signals of aggression with ritualized combat. Although assault generally does not occur during this period, assault is possible.

Listed below are some early behavior warning signals (ritual combat) as identified by the Wyoming Law Enforcement Academy:

### **EARLY BEHAVIOR SIGNALS (ASSAULT IS POSSIBLE)**

- Head back – shoulders back and squared to you
- Face turns red on light skin individuals
- Lips pushed forward bearing the teeth
- Excessive salivation such as spitting
- Breathing is quicker and deeper than normal
- Sweating
- Looking at you with an empty stare
- Eyes have a glazed look
- Direct uninterrupted eye contact
- Belligerent, challenging, yelling, cursing, etc.
- Exaggerated movements – pacing, turning, pointing, fist threatening with arm bent and held sideways, hands on hip
- Standing as tall as possible

- Redirects activity because the aggressor stimulating the attack is too frightened to directly assault the victim

Listed below are some signals indicating an imminent physical assault. The more signals observed by the victim, the greater the threat:

#### **ASSAULT IS IMMINENT (SIGNALS)**

- Face goes from red to white
- Lips tighten over the teeth
- Breathing is rapid and deep
- Stance changes – bladed position, shifts forward or back
- Verbalization stops
- Hands set, shoulder shift/drop
- Clinching fists
- Body leans forward
- Attacker begins sizing you up

### **New indicators of aggression in gangs**

With the growth of organized gangs there are certain gang-related indicators of aggression that need to be recognized. Some are associated specifically with the gang culture but will certainly find their way into the mainstream of society.

- Spitting - A person who spits on the ground especially if you're a police officer as a show of disrespect for authority.
- Grabbing the groin area - Grabbing the groin and then pointing his finger at you may be a sign of defiance in many gang cultures.
- Emotional mood swings - You should pay special attention when the person displays dramatic mood swings such as very angry to laughing.
- Persons who are intoxicated are far more likely to become more aggressive. (Johnson, 1994)

By being able to read behavior signals as they are occurring from the attacker this will enable you to prepare for either combat or escape more effectively. These signals should assist in implementing your breathing patterns.

#### **# 3 – Accept the threat**

By recognizing signs of aggression, you will be able to accept that there is an imminent threat to your safety. No person relishes the fact that they may have

to resort to hand-to-hand combat in order to survive a situation. It is our human nature to survive. Studies have shown that pleading for your life in a self-defense situation rarely works. When the threat is imminent, you must act upon your training and trust that you have practiced sufficiently.

#### **Here are some ways of staying mentally fit**

- Stay up to date on tactics and techniques. Attempt to limit your trained response techniques to only a few thus limiting the time for responding to an attack.
- Practice mental imagery at least once a week. Think of scenarios that could happen to you and what response you would use to survive the situation. Always think of which technique you would implement if another doesn't work on your attacker. Don't stop striking until the threat is over!
- Learn what the physiological responses are to the fight or flight response and understand what will happen.
- Understand that you may have to use deadly force. This isn't something you think of every day even as a police officer. In fact, we try not to think about the possibility of using deadly force. Humans naturally harmonize with each other. However, it may occur that when deadly force is used against us in a self-defense situation, we have to reach within our sub-conscience to resort to whatever techniques we need in order to insure our survival.
- Understand that if the attacker presents a knife and you cannot flee, there is a very strong possibility that you will be injured, but you will be able to continue to fight back and conquer.
- Strive to improve your observation and assessment skills. Keep your head up and focus forward when you are walking down the street or even inside a building, **don't look down!** Go ahead, the next time you walk down the street, watch how many people walking towards you are looking down at the ground and not paying attention to you or their surroundings. These people are simply too pre-occupied to think of their own safety. Attackers are always looking for the element of surprise on those who are not paying attention.
- Trust your intuition and instincts. Your intuition will attempt to advise you of a threat before you realize what is happening. Listen to yourself and react early to what your sub-conscience is telling you.
- Develop a powerful will to survive. This may sound easy; however, it is not. It requires you to reach deep into your soul and find the answers about why you are here on this earth. Most likely,

you will have to think of all your family and friends that you have around you.

- Stay mentally positive. Are you half empty or half full? You may not be stronger than your attacker; however, it is the tiger in the tank that matters.

#### **# 4 - Recognize your acute stress symptoms**

When we have perceived a significant threat to ourselves, we will most likely have some or all of these physical changes:

- Pupils will dilate making us see even better in the darkness.
- Our cardiovascular system leaps into action by increasing our heart rate, pumping up to five gallons per minute into our arteries and then constricting to maximize pressure around the system whilst the veins open up to ease return of blood to the heart.
- The respiratory system joins in as the lungs, throat and nostrils open up, and breathing speeds up to get more air in the system so the increased blood flow can be re-oxygenated. The blood carries oxygen to the muscles, allowing them to work harder.
- Blood vessels to the skin constrict, reducing any potential blood loss. Sweat glands also open, providing external cooling for our over-worked system.
- Fat from fatty tissue cells and glucose from the liver metabolize to create instant energy.
- Blood vessels to the kidney and the digestive system constrict, effectively shutting down systems that are not essential. A part of this effect is reduction of saliva in the mouth. Your bowel and bladder may also lose their functions involuntarily.
- Endorphines, which are the body's natural painkillers, are released. This is why you won't feel any initial pain. (Fight, 2007)

The natural judgment system is also turned down and more primitive responses take over. This is time for action and not deep thought.

Darren Laur and Bruce Siddle are leading experts in Law Enforcement acute stress syndrome. Siddle is also a retired law enforcement officer and has written two books entitled "Survival Stress Reaction" (SSR) and "Sharpening the Warriors Edge the Psychology and Science of Training." Bruce Siddle has extensive research through actual real case studies. The following is a summary of their findings:

Siddle's definition of Survival Stress Reaction (SSR) as it relates to combat is; "a state where a "perceived" high threat stimulus automatically engages the parasympathetic nervous system." The parasympathetic nervous system is an

autonomic response process, which when activated, one has little control of. Why is the Survival Stress Reaction so important when it comes to combat / self-protection? When activated, SSR has both a psychological and physiological effect on the body, which could effect one's perception to a threat in a negative way.

### **Symptoms from a martial arts standpoint**

- At 115 beats per minute (bpm) most people will lose fine complex motor skills such as finger dexterity, eye to hand co-ordination, multi tasking becomes difficult.
- At 145 bpm, most people will lose complex motor skills (3 or more motor skills designed to work in unison) (Laur)

### **Effects to Visual System**

The visual system is the primary sensory organ of the body for those of us that can see. Due to the fact that the visual system sends information to the brain that is needed during combat / self-protection.

- At approximately 175 bpm, a person will experience an eye/lid lift, pupils will dilate and flatten. As this reaction takes place, a person will experience visual narrowing (commonly known as tunnel vision). During this phase, you may become "binocular" rather than "monocular."
- At 175 bpm, visual tracking becomes difficult. This is important when it comes to multiple attackers. During multiples, the brain will want the visual system to stay with what it sees to be the primary threat. Once the threat has been neutralized, the brain and visual systems will locate the next threat. This is commonly known as the "lighthouse" effect. Studies have shown that a person in SSR will experience approximately 70% decrease in their visual field. That is why it is so important to train to scan for multiple attackers.
- At 175 bpm, it is also becomes difficult to focus on close objects. One of the first things to go under SSR is depth perception. A fighter will become far sighted rather than near sighted. This may be why it appears that when you are sparring with a partner, you sometimes lose sight of your targets.

I can recall on one particular SRG aka. S.W.A.T. mission a few years back. Our 6-man SRG team was commissioned to enter a residence authorized by a court order to execute a "no-knock" search warrant. Located inside of the residence was an adult male that had threatened his girlfriend with serious bodily harm. Details of this person indicated that he was wanted as a fugitive in the state of New Mexico in connections with a homicide. This male subject was known to be heavily armed inside the residence and advised authorities that he would



not be taken alive. The male subject was also known to have a large quantity of methamphetamine in his possession and to be “high on meth” at the time. This information was relayed to Law Enforcement from the adult female who managed to escape from the residence prior to our engagement. Upon our SRG team’s arrival, I was instructed to be first in the line up when we arrived at the rear entrance of the residence. My specific duty was to open the door and throw a flashbang distraction device inside the residence. This distraction would enable the SRG team to enter the residence while confusing the suspect for a short period of time until he had been captured. The SRG team walked tactically to the rear side of the residence and walked slowly inside a very narrow mudroom that was approximately 6 feet long leading to the rear entry door. Upon receiving the orders to enter the residence, I opened the door and observed the suspect in the living room running towards me. I then threw the flashbang device over his head, which landed directly behind him on the floor. The flashbang struck the floor and activated. We then entered the residence and upon hearing and seeing the flashbang, the suspect fell to the floor where a loaded 45-caliber handgun slid from underneath his waistband landing a few feet in front of his head. One of the team members and I landed on top of the suspect and after securing the loaded handgun, we placed him into handcuffs. It wasn’t till after the incident that an officer who was standing outside the residence assisting with perimeter duties asked all of the team members if we had either observed or felt a very large dog that had ran past us through the mud room exiting the residence just after the flashbang activated. All of the SRG team members laughed that not one of us had seen or felt the large dog as it past through the mudroom. We all came to the conclusion that with all our protective gear on, there wasn’t enough room in the mudroom for all of us let alone a large dog running through past us. Knowing that our lives were on the line, we had lost all our peripheral vision during the entry.

### **Effects of the Auditory System**

At approximately 145 bpm, the part of the brain that hears shuts down during SSR. This is why it is common for some martial arts students who are sparring during class time to not hear the commands from the instructor to “STOP or GO MON”

### **Effects to the Brain**

At approximately 175 bpm it is not uncommon for a person to have difficulty remembering what took place or what they did during a confrontation. This recall problem is known as “Critical Stress Amnesia.” After a critical incident, it is not common for a person to only recall approximately 30% of what happened in the first 24 hours, 50% in 48 hours, and 75-95% in 72 – 100 hours.

- At 185 – 220 bpm. Most people will go into a state of hyper vigilance,” this is also commonly known as the “deer in the headlights” or “Brain fart mode.” It is not uncommon for a person to continue doing things that are not effective or show

irrational behavior. This is also the state in which people find themselves in when they say that they can't move, yell, or scream.

Ask a student what they remember after they have taken a promotional examination and chances are they won't remember much. This can all be related to hyper vigilance.

### **Effects of Motor Skill performance**

At approximately 115 bpm, fine/complex motor skills become less available or effective; however, your gross motor skills will turn on and become optimized.

Siddle found out through his research that the higher the heart rate, the more SSR effects one's perception of threat. Also, the higher the heart rate, the more negative effects it will have on motor skill performance. One must remember that when in combat or a sudden perception of deadly force upon yourself, your heart rate can go from 70 bpm to 220 bpm in less than half a second. You are walking around a corner inside a building and suddenly you run into something. After a second goes by, you identify the object is human and that it was not a threat. However, it was during that second that your heart rate climbed quickly upwards and you survived a SSR effect.

Siddle in his studies found out that the "combat maximum performance range" when it comes to SSR, is between 115 –145 bpm. Siddle also found that a fighter's "maximum reaction time performance range" is also between 115 – 145 bpm. So just remember, the 115 – 145 bpm range is where fighting skills (gross motor) and reaction time maximized.

Recently, while training with our S.W.A.T. team, I participated in an exercise with other group members what consisted of running, jumping and dragging equipment through an obstacle course while shooting our MP40s sub-machine guns at various targets. We were each required to wear full gear, which included flak jackets with a heavy armored steel plate inside, along with additional equipment. All the equipment we were wearing was approximately 80 to 90 lbs. The weather was a little on the warm side being approximately 85 degrees. I found that during the first few minutes of the course, my bpm increased dramatically, my vision narrowed significantly and my fine motor skills for understanding instructions decrease severely. It wasn't until I wrote this thesis that I related my symptoms of this exercise to the SSR.

How can this relate to you as martial artists?

You have to remember that if you are challenged, you will be at a disadvantage. Your bad guy has already picked his territory and his/her time. You should expect that you won't be able to execute your self-defense techniques as correctly as you do in class. It is possible and should be expected that there will be multiple attackers and ones that are outside your peripheral vision.



(Griffith, 2007)

Siddle's groundbreaking studies of the effects of fear and survival stress on officers in

Combat are shown above:

#### # 5 - Begin to manage your breathing patterns

- This is also known as autogenic breathing
- When you are presented with a threat, breath in through the nose for a three count, hold for a two count, and then breath out through the mouth for a three count. Studies have shown that if a person was to do this for a three-cycle count, your heart rate will decrease up to 30% up to 40 seconds. To put that into perspective, if your heart rate was approximately 175 – 220 bpm, autogenic breathing could decrease your heart rate into the target range of 115 – 145 bpm.
- Remember! We breathe non-stop and we never get a chance to change the rhythm. Generally, while you are training, you are concentrating so hard on accomplishing the technique that you simply forget to breath. Therefore, the very best time to practice controlling your breathing is while you are training. For instance, while training, concentrate on breathing nothing but

full breaths throughout the class. It will be a little more difficult than you think. How many times have you caught yourself out of breath during a workout and after the fact, reminded yourself to breathe. How can you expect to calm yourself down in that split second if you're not prepared? Recognize your threat and begin breathing the three-cycle count!

#### **# 6 - Create a plan to either fight or give flight**

- This is for you to decide. To fight an attacker is not always the answer. Many variables will confront you quickly and without warning. You may have to determine whether the attacker has a weapon or not. You will also have to determine what the nature of terrain has to offer around you.
- A number of researches have developed a description of your mental processes on the onset of a critical incident. Lovette's is probably the best known:
  1. Perceive the problem (.25 seconds) the majority of attacks on police officers are preceded by body language. In every instance I was authorized to use force on a person, I observed warning signals.
  2. Evaluate the problem (.25 seconds) by recognizing signs of aggression; you will be able to accept the imminent threat to your safety.
  3. Select a response (.25 seconds) after recognizing a threat and accepting that it is going to occur. Formulate a plan to survive and win the encounter. Remember that you will need a variety of techniques in your arsenal should a few not be successful.
  4. Initiate the response (time depends the response selected) you may begin to breathe at this time or before you begin to initiate the response. Use distance and movement to make yourself less of a target. Create diversions to assist in ensuring your possible escape to safety. Most attackers will be prepared for your pre-planned response. (Lovette, 2000)

Although we have examined many ways of managing your fight or flight syndrome, the most important aspect of managing you're fight or flight symptoms rely on your tactical breathing. If you find yourself in bad situation, and you do your tactical breathing the correct way, you will assist in deactivating the Sympathetic Nervous System mass discharge. Your body will be able to process the situation visually, auditory, and cognitively. This is called homeostasis, meaning your body is in harmony with itself. This will give you one of the very best ways to stay calm and in control and hopefully keep you safe.

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- Chris Ivanoff has been and is currently employed as a patrol deputy with the Park County Sheriff's Office in Cody, Wyoming for the last thirteen years. Chris Ivanoff is a Custody & Control instructor and has been a team member on the Park County S.W.A.T team for the last eleven years. He also operated Lone Wolf Taekwondo through the Powell Recreation District and Northwest College in Powell, Wyoming for the past twenty-five years.