Complex Training for Law Enforcement

Practical advice from an accomplished Romanian athletic fitness expert

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Istvan Javorek was a multi-sport athlete who went on to become a respected coach in Romania and later the United States. Boot camp workouts, along with those callisthenic infomercials shot in black-and-white with shaky webcams, have become popular among many law enforcement professionals. These workouts could be categorized as complex training, as you combine several exercises into a single set. If you want to learn how to get the most from complex training, a great place to start is by picking the brain of Istvan Javorek.

Javorek’s accomplishments as both an athlete and a coach have been matched by few. Here is a sampling of his training successes:

- Sumya Anani, world champion female boxer
- Arturo Barrios, former 10,000m world record holder
- Floyd Heard, 1986 world’s fastest 200m sprinter
- Ian James, Canadian long jump record holder
- Ed Kaminski, ’93 World Champs, silver, hammer
- Francisco Olivare, Mexican triple jump record holder
- Katie Panek, 1996 Olympian, hammer thrower
- Kit Pellow, Major League Baseball player
- Kareem Rush, NBA player
- Wayne Simien, Jr., first-round, 2005 NBA draft
- Juan Gerardo de la Garza Tenorio, 1987 Pan American Games bronze medalist, javelin
- Shawn Beyer and Carlos Olivas, All-American soccer players who played professionally in the NPSL

One great testament to how quickly Javorek’s training methods can make a difference can be found in the development of shot-putter Randy Barnes. After four months of 4-a-day training under Javorek’s tutelage, Barnes went from being a 136-kilo athlete who could snatch 95 and power clean 125, to a 122-kilo physical specimen who could snatch 130 and clean and jerk 160. Barnes went on to become an Olympic champion and world record holder, crediting Javorek with his remarkable improvement (from 18 meters to over 21 meters) in the shot put. Barnes went on to earn a silver medal in the 1988 Olympics and a gold medal in the 1996 Olympics.

From Pencil Neck to Power Man

Starting out as a self-proclaimed “weak kid” who weighed just 45 kilos when he was 16, through hard work and smart training Javorek developed into a formidable athlete. At a bodyweight of roughly 76 kilos, he was able to back squat 200 kilos, clean and jerk 155, snatch 115, and press 130 while running 6.9 seconds in the 60 meters. He qualified for the 1968 Olympic team, but for political reason his country did not allow him to compete.

Javorek began developing future Olympians at the Clujana Athletic Club-Cluj in Romania. Most notable were 1984 Olympic bronze medalist and future US national coach Dragomir Cioroslan and 1984 Olympic silver medalist Istvan Tasnadi. At a bodyweight of 111 kilos, Tasnadi could jump onto a 42-inch box 20 times consecutively and could run the 60-meter dash in 7.1 seconds.

With the success of these and many other athletes under his tutelage, Javorek decided to take his talents to the United States, emigrating in February 1983. In his first year in the US, Javorek was invited by the South Korean Olympic Committee to train that country’s national weightlifting team and instruct their coaches. In January 1984 Bela Karolyi hired him to coach at World Gymnastics Academy in Houston, Texas. Later that year, Javorek was hired as the assistant strength and conditioning coach at Texas A&M University. In 1987 he became the strength coach and a professor of fitness at Johnson Country Community College in Overland Park, Kansas.

While at JCCC, Javorek developed many exceptional athletes, including weightlifters Jim Dice, a two-time National Collegiate Champion in weightlifting, and Wesley Barnett. Barnett developed into a world-class weightlifter, breaking American records and competing in two Olympics. Barnett did a standing long jump of 10.4 feet, did a 64-foot throw on the overhead backward 10-pound medicine ball throw and ran 30 meters in 3.98 seconds. Barnett went on to become a silver medalist at the 1997 World Weightlifting Championships in the 110-kilo bodyweight class.

Javorek, or “Coach Javorkian,” as he is known among his athletes, is a man of tremendous knowledge, experience and integrity. He has written a great, practical book about his type of training, Javorek Complex Conditioning (www.istvanjavorek.com). It’s a must-read, how-to book for all personal trainers, strength coaches and anyone who wants to broaden their knowledge of the iron game.
The following is a sampling of a world-class coach’s perspective on complex training and its effectiveness in the physical development of law enforcement professionals.

**How popular is complex training with law enforcement branches?**
Various forms of complex and circuit training have become extremely popular among military and police professionals over the past decade, and many firefighters have sworn by the effectiveness of this programming. The Toronto police academy has used my complexes as a primary training tool to ensure fitness levels of their recruits. Because complex circuits require little space or equipment, they are an effective training tool for those in army barracks as well as those who lack the time or means to get to the gym.

**With the proven success of complex training for athletes, do you believe it is an effective training paradigm for law enforcement?**
Definitely! Complex training builds the individual as a whole unit. Because it develops coordination, stabilizer muscle strength, power, flexibility and conditioning, complex training is a highly efficient and effective method for physical development.

**Are there any precautions to take into consideration for this type of training?**
Proper progression is key. Trainees need to learn to walk before they can run. It is for this reason that proper technique is so critical. Too many athletes want to jump to the exciting stuff before establishing a proper foundation to build strength, avoid injury and ensure success.

**What is the best way to start complex training?**
Dumbbells. Dumbbells are capable of building range of motion, stabilizer muscle strength, coordination, strength, power and flexibility. They are the safest and most effective way to start complex training. Dumbbells are also great for developing one of the most important factors in law enforcement safety: grip strength. In the beginning, a new trainee or those with structural imbalances can utilize dumbbells for all their complexes, or they can alternate between dumbbell complexes and barbell complexes.

**How many workouts do you recommend per week?**
This depends on many factors, including stress, genetics, nutrition, recovery protocols and training status. Another important factor is age. For example, at the age of 10, recovery from a workout can occur within roughly 30 minutes. At age 15 it takes roughly one hour. And at the age of 20 it takes roughly one day. When you prescribe a workout to a 20-year-old, you need a completely different approach from one for a 40-year-old. A general guideline is three workouts per week for everyone. If time permits, it’s even more effective to break the workout down into two workouts per day.

The objective is to keep workouts short but intense. With short workouts, testosterone levels are not allowed to drop dramatically, therefore increasing the anabolic effect of each workout.

**What exercises do you believe are most important for professionals in the law enforcement field?**
Technical understanding and mastery of dumbbell and unilateral exercises should be a priority. Bench presses are important, as are chin-ups and dips. Other more advanced exercises might include midsection plyometrics, hill or stair sprints, shorter plyometrics, rope climbing, gymnastic rings or parallel bar work. Medicine ball throws are very important, as they train reflexes, coordination and hand speed, while also increasing the ability at which power is expressed. Olympic lifts are for Olympic athletes.

**How do you prescribe the weight for each complex?**
The weight is chosen according to the exercise that is the limiting factor. For example, one may be able to squat push press 50 kilos, but only be able to upright row 30 kilos. To avoid injury and ensure proper technical execution, 30 kilos is chosen for the complex.

Law enforcement professionals often spend quite a bit of time in a seated position. Do you have any recommendations to avoid potential injuries, especially those due to transitioning from sitting to sprinting, as seen in many car-to-foot chases?

A few things we used to do with our athletes could work very well. When preparing to exit a vehicle, it is critical to isometrically contract the body’s muscles. Isometric contractions of the low back, hamstrings, quadriceps, gluteal musculature, calves, upper back, neck and shoulders can increase blood flow to the tissue while warming up the muscles for any sudden movements.

Another technique we used was to allow the trainee to sit on their hamstrings during a long car or plane ride. Sitting for a long time with pressure on the hamstrings can decrease the blood flow to the hamstring muscles, allowing them to become rigid and less responsive to physical activity. Instead we had our athletes sit on a hard book placed under their glutes only.

Other methods of avoiding back pain and fatigue from long periods of sitting is to include a stop every 90 minutes to stand up, stretch, and perform some light reactive/submaximal plyometric exercises. We also had our athletes trying to remain physically active by performing leg exercises in the car.

**With that in mind, when is the ideal time to engage in physical activity?**
The nervous system needs 4-5 hours to warm up. So if a trainee or athlete has a physically demanding workout or competition, they need to ensure they wake up early enough to ensure optimal performance. Another tool is proper warm-up before walking out the door. This might consist of a light general warm-up, a hot shower and a cold-water friction rub.

**Coach, thank you very much for your time and valuable insight.**
You are very welcome. It is a pleasure to share my experiences with the law enforcement profession.