

SHOT PUT TRAINING - REMARKS OF CHAMPIONS

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I suppose it is the inevitable by-product of the fast paced technological world we live in, but it strikes me we do not allow ourselves the luxury of listening to those who, in our chosen vocations, have gone before us. All too often we fail to heed the words of our predecessors and end up having to discover truths that have been already discovered many times over.

This is particularly true in sports. We tend to think of our champions as faceless entities with nothing to offer developing athletes. Eastern-bloc athletes, for example, are considered “mysterious robots” who are programmed by an efficient system to succeed. This is far from the truth, for many champions from these countries are in fact intelligent, thoughtful people who have succeeded because they have put considerable time into their respective programs and their sport.

When you stop and think about it and try to put into perspective feelings we all share, to be a champion in track and field is an amazing accomplishment. If we take the shot put for instance there have only been 22 Olympic champions. Out of four billion people only 22 have won the Olympic Gold! Quite remarkable.

I have always found it interesting to listen to champions and hear why they think they reached the pinnacle of their sport. The information these “super” human beings provide has a different, and possibly more beneficial flavor than the myriad theoretical papers that are extant. With this in mind I put together this article based on my conversations with three great champions in shot put, Edward Sarul, World Champion in Helsinki in 1983, Wladyslaw Komar, Olympic Champion in Munich in 1972 and Werner Gunthor, World Champion in Rome in 1987.

The material I present here is a compilation of my personal contact with the athletes, interviews, and was extended by some data printed in the Polish publication “Lekkoatletyka” in 1984 and 1987. I would also like to thank Mr. Hans-Rudi Kunz who helped me when I interviewed Werner Gunthor at the World Championships in Rome in 1987.

BP - When did you start to practice systematically?

Komar - I guess I really started training in a systematic fashion when I was 20. But before that I had at least 5-6 years of general physical preparation. I swam, dove, boxed and played games such as European Handball and rugby.

Sarul - I started earlier, I think I was 15. At the age of 17 I was sixth at The Youth Spartikade. I put the 6kg shot 14.85 m.

BP - Taking into account personal differences, how many years do you think it takes to achieve world-class results?

Komar - If an athlete is young, say 15-16 years old, and wants to be a world class thrower and if we assume they haven't had any training and take for granted they have the latent talent I would say it takes 2-3 years of general preparation and then 4-5 years of specialized shot put training. All together a young athlete must invest 6-8 years. Myself I achieved good results after four years of shot training. In 1964 I had the best results in Europe and was ranked pretty high in the world at the time (Komar's progressions at the time were 1960 - 13.60; 1961 - 15.48; 1962 - 17.10; 1963 - 18.80 and 1964 - 19.60)

Sarul - I think 8-10 years. As I mentioned I started practice when I was 15 and got into intensive training, about 4-5 hours a day, when I was 18. (Sarul became World Champion when he was 25.)

BP - You mentioned that you both did a lot of other sports. Why is that? Does it help develop the required physical attributes of a champion?

Komar - I suppose some people think of shot putters as very strong and nothing else. The truth is a successful shot put athlete must be just an excellent over-all athlete. He or she should have good, if not great, sprinting ability, jumping ability and a high level of coordination. This is the benefit of other sports. (Komar's results: 100m - 11 sec., long jump 7.21, triple jump 14.86, HJ straddle - 1.90. He was also Polish national decathlon champion in 1962, was top national rugby player and an international calibre boxer.)

Gunthor - A shot putter has to be a good jumper. I have been a good jumper from the beginning and now I can jump 3.60 m in the standing long jump (Gunthor stands 2.00 m high and weighs 127 kg). His standing long jump distance is the second best ever achieved by a thrower. (Brian Oldfield of the United States jumped 3.68 m)

BP - If you could offer advice to the novice thrower, what would it be?

Sarul - I would advise young people to start with other sports in order that they may develop speed and power through such games as basketball or European Handball. You shouldn't start with specialized shot training. When the actual shot

training is started there should be a lot of development of the technical aspects of the sport.

Intensive weight training shouldn't start until the athlete is 20. This doesn't mean strength exercises should be ignored in the earlier stages of development, but they should be done in great balance with the shot technique work and with speed and jumping. Strength can be deceiving because I used to win competitions against many throwers who were stronger than I was.

Gunthor - You must not neglect the development of speed and jumping. Serious weight lifting can be put off until later, but dynamic exercises should be performed right from the start. I started serious weight training five years ago, when I was 21.

BP - When you do weight lift, what types of exercises would you recommend?

Sarul - I think we would all agree that snatch, cleans, continuous clean and jerk and squats are the most important. Some throwers do a lot of bench press and jerks behind the neck.

BP - Okay, using those exercises as a base, what type of training method would you suggest to a novice thrower?

Komar - There are no hard and fast rules. I think the best "regular" for load and intensity is an athlete's body and psychological approach. The key should be whether or not the exercises are still "fun." When I trained, the minute the lifting ceased to be fun I put the brakes on and slowed down the development. I would either not lift or cut out certain exercises. On the other hand, if I found during a workout that I felt good and was doing better than I anticipated, I would increase the number of sets and weights. Sometimes if I didn't feel like lifting I would go for a run in the woods. As an aside, after my lifting I always did some stretching and running exercises to keep limber.

In my opinion the best exercises for shot are those in which all muscle groups are worked, things like the snatch. Specific exercises such as bench press I would only do at the beginning of a training session and then only lift 50% of the load.

Sarul - You have to know your body and know when to stop. For example, I make use of the program prepared by my coach, but I will change the number of sets of the weights depending on how I feel that day. This is where experience is valuable because cutting down your work load can help you avoid injury. I also never do isometric or isolated muscle group exercises because of their unnatural amplitude of motion.

Gunthor - Shot putters must have a great level of general power. To achieve this there should be an emphasis on global strength exercises.

BP - The public has an image of shot putters as simply being very strong, yet all three of you do a lot of speed training. Why is that?

Sarul - Lately I have not done a lot of speed running, but I do concentrate on throwing speed development. I spend a lot of time putting light shots. I do heaving with 16- pound shot, things like overhead backwards, underhand forwards and sideways like a hammer. But I only put light shots. My feeling is that during training I am tired and I can't throw the heavier shot as smoothly as I should. This develops bad throwing technique. I do maybe 20 standing puts and 40 with the glide using light shots. I think this helps me develop speed.

Gunthor - Specific speed for throwers is of prime importance. I make a lot of use of medicine ball throws during my work outs. I can heave a 3 kg medicine ball more than 23 m (overhead forward standing position).

Komar - I made use of a lot of running work to develop speed. There are two aspects to shot speed training running and throwing speed. Running speed, which is important because it teaches economy of motion and helps develop fluidity in the athlete, is developed by running short distances like 30 to 60 m and through team sports such as soccer or basketball.

BP - Is there any relationship between results using different weights of shot?

Komar - There is, but throwing is not a static pursuit and therefore the relationship changes. I remember periods in my training where I was putting 6 kg shots and 7.26 kg shots NSCA Journal, Volume 10, Number 3, 1988 into the same holes. If this is occurring, the athletes probably overdid their strength training.

Sarul - You have to judge your results based on your training cycles. About four days before the Helsinki final I put a 4 kg shot 28.40. I also put the 5 kg shot 25.80 m, but my 6 kg throw was not that much farther than my 7.26 throws.

BP - You mentioned earlier that jumping ability was very important to the shot. Can you improve this and if so how would you go about it?

Komar - The best exercises for shot putters are jumps using both legs in the take off. Exercises like triple-bound, standing long jump, jumps over hurdles and standing high jump are all important and they can be performed anywhere or anytime.

For the beginners, the most important jumps are backward jumps and running backwards. This will help them develop a "feeling" for moving backwards and help develop the glide movement. For more advanced throwers these exercises are still important, but they should be performed with an additional load on the shoulders. A sand bag is the best since it is easier to handle.

One must also remember not to exaggerate with the volume of jumping, especially depth jumps, which can have a negative influence on coordination and also cause knee and ankle injuries.

BP - We have talked a lot about how an athlete should approach training, but what advice would offer to a coach who wants to get the most out of his athletes?

Komar - Obviously a coach must prepare a workout schedule for a group of athletes. But this planning should have limits and guidelines, and the coach must be aware of the dynamics of the group on that particular day. A workout should not be looked at as a cook's recipe that must be followed exactly as it was written for it to be a success. This means that the athletes must be aware of their bodies and increase or decrease the intensity of the workout accordingly.

A good example of a coach being tuned to the needs of his athletes is my coach Zieleniewski. He would usually schedule a light warm-up for about 15 minutes, something like soccer for example. But if he saw that we were into the game and that even though he had prepared a workout, playing a game was better for us on that day, he just let us play for the entire workout. He saw that everyone was deeply involved in the game, and he didn't want to spoil the pleasure of the practice and the pleasure of the competition. On the other hand, if he saw that we were listless during our strength training, he would either change the workout completely or stop it all together.

The mastery of this coach was that he would prepare a very tight workout schedule, but each day the athletes left the gym feeling that they had created their own workout plan. To my mind this is the best management/coaching style.

Sarul - A good coach must be well prepared and also flexible. A workout must be prepared to see where the athletes are on a particular day. Coaching is more of an art, not a mechanical vocation. Too many coaches make a big mistake by reading the books or articles by other coaches or athletes, and instead of adapting them to the ability of their athletes, just copy the programs with little thought and whether or not it is appropriate.