The Athlete Defined: A Soviet System of Rank

By
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Several questions have been asked lately regarding the "discrepancies" in the Nautilus philosophy—Yessis rebuttal articles (see Vol. 1 Nos. 4-5, Vol. 2 Nos. 3-4) and the last column regarding variability (Vol. 3 No. 2). Readers are asking why all of these seemingly "true facts" lead to confusion with no clear cut answers. To answer these questions we must look at what is presently taking place in the training of athletes in the United States and the Soviet Union.

To begin with, we must first separate athletes from athletes and from the average person. Usually we think of an athlete as someone who plays a sport without considering the level on which he plays. We differentiate between professional, collegiate and secondary school athletic levels, or simply amateur and pro. This is based on the assumption that the level of expertise rises with each level, which, as a rule, is generally true. But, we do not have any specific gradations within each level or from level to level. If there are any, they are assumptions with no testing to substantiate them. There are not even valid generalizations as to how athletes move from one level to the next. For example, in baseball, high school athletes often go straight to pro teams, and football and basketball players many times go pro from college before graduation, and other times athletes complete their college careers before going up to professional ball.

Many "weekend players" think of themselves as athletes, as do some players who participate on a regular basis three or more times per week. With the fitness boom going on today more and more people are taking up sports which confuses the issue all the more. There are also many youngsters who consider themselves athletes because they play on the neighborhood soccer or baseball team while others become athletes merely by going out for the team. In addition, we are beginning to see more and more youngsters competing with adults in major sporting competitions (mainly in tennis, swimming and gymnastics). With such a wide spread of participation and with so many levels it is difficult to keep a clear picture of what is going on in the world of sports.

In the Soviet Union and the other socialist block nations there is no such dilemma. For every level of sports endeavor they have awards signifying the level attained, usually in the form of a GTO badge which is their basic physical fitness insignia, meaning "Be Ready for Labor and Defense." Norms are established from childhood (usually 10-11 years of age) and go through the elderly (to 65 and above). These GTO tests employ many sports events and so are also used in the early years to signify levels of athletic ability. Those aspiring to become high level athletes must pass
more rigorous requirements. Standardized norms must be fulfilled before the person can become ranked, 3rd class athlete for the lowest level, through Master of Sport, International class which signifies the highest level performer.

Each rank is based on actual performance, the level of which changes as the level of the sport increases. For example in track and field for men according to the classification norms for 1981-1994 in the 100 meter sprint, for Master of Sport (MS) and MS International class (MSI) the athlete must do a 10.3 second sprint, candidate for MS—10.6, 1st class—11.0, 2nd class—11.5, 3rd class—12.2, 1st class Junior level—12.6, 2nd class Junior—13.0 and 3rd class Junior—13.4. For women in the 1500m race for MSI, the time is 4:00 minutes; for MS—4:16; candidate for MS—4:27; Class I—4:42; Class II—5:02; Class III—5:27; junior level, class I—5:41; class II—6:00; and class III—6:20. Similar norms are set for all other events including various tests that are used to check on the athlete’s progress. For example, in running, there are norms for the 30, 60, 100, 200, 300, 400, 500, 600, 800, 1,000, 1.500, 3,000, 5,000 and 10,000 meter runs in addition to norms for 4 relays and 7 hurdle events.

Team sports levels are established by the kind of league, the number of wins and losses, if there was any regional or national play and so on. With such a system it is easy to see that there is little confusion in regard to the level of athlete in question.

In their research and studies the Soviets are very specific about the subjects being used. There are clear distinctions made so that there are no misunderstandings of the level of athlete and the findings. They have found in their research that there are definite differences between athletes in the various classifications in regard to physiological functions, capabilities, technique and other abilities. The conclusions are very precise. They may take the form of "... for 3rd class athletes this exercise is effective but has no influence with MS athletes."

In the U.S., however, almost all of the research is done with average students, the school’s athletes (whatever level they may be) or physical education majors who supposedly are typical athletes (which is far from the truth in most instances). The conclusions are generalized with applications extended to all levels of athletes. In most cases this has led to erroneous findings and confusion. The confusion occurs when another school does a similar study but uses different "athletes" and, of course, comes up with different results.

In many cases it is not the fault of the researchers as they have no choice, especially in the "publish or perish" atmosphere which exists in almost all major universities and colleges. In addition they cannot always get the needed subjects as such athletes are non-existent at their centers.

Such is not the case in the Soviet Union. Almost all ranked athletes are either in a local sports club or attend one of the physical education institutes. It is therefore very easy to get ranked athletes for the research which is very practical. The research is done to assist the coaches, and very often the problems for the researchers originate with the coaches.

In addition, they do research in all Olympic sports, both winter and summer events. In some sports, such as track and field, they have specialized centers where the athletes work out, learn and are studied (for those aspiring to be coaches). This was the case with Valery Borzov, who won the 100 and 200m events at Munich. Borzov’s coach, Petrovsky, was also his professor at the Kiev Institute of Physical Culture and who conducted some of the biomechanical and physiological research on him.

The Soviet system of training athletes is very organized, and extensive records are kept on each individual. Physical data, test data, film clips, etc. are recorded for use in testing and in training. Because of this, there is very little subjectivity in what they do. It also doesn’t leave much room for argument as to the effects of one or another program or what constitutes effective technique and so on. There is, however, much discussion on some topics, especially those that are “new” or still in the stage where clear-cut answers or directions do not as yet exist. Also you should not think that all the coaches do exactly the same thing in their training programs. They are still left to do things on their own although the basic structure of the training is the same. It is within this individual range that creative coaches can move up the line to coach on the highest levels, if so desired.

The above material was presented to show how in the scientifically advanced sporting nations all research and conclusions are very specific to the type of athlete and level of athlete. Findings or conclusions made with one group of athletes (both level and sport) are not used with another. Tests used for one group of athletes are not necessarily the same for other groups. For example, the Harvard step test, the FWC test for trainedness, and the Maxwells test for anaerobic fitness have all been modified to suit for use with different groups of athletes. They found that the tests did not accurately measure certain types (levels) of athletes.

And so we can see how even when just talking about athletes we should be very specific. This will prevent or avoid a great deal of confusion when referring to athletes and their training programs. For example, there is today a great deal of confusion in this country in the area of strength. Which is better, machine weights or free weights, concentric or eccentric, 1 set or 5 sets, 5 reps or 10 reps, circuit training or single station, 3x3 or 5x5 and so the questions go ad infinitum.

Instead of trying to answer these questions with broad sweeping conclusions, we should first delineate the age, sex, type of sport and level of preparation. The answers may then become clear. For example, regarding machine vs free weights: In the early stages of training in the year-round program, especially with lower-ranked athletes, machine weights are fine when desiring strength. However, as the season approaches and the level of preparation of the athlete increases, free weights are needed both for strength as required in the sport and for power work. Whether the contractions should be concentric or eccentric, isokinetic or isometric will depend on the result desired and the specifics of the sport involved. The number of sets and reps will also depend on what is desired whether it be bulk, strength, muscular endurance, coordination and so on.

If we set the parameters and keep our focus on a specific area and level we will create less confusion and more understanding. We may then be able to examine more closely the phenomenon of specificity in training along with general concept of general vs specific training is most confusing in strength and muscular endurance development and will be examined in more detail in the near future.