

The Sport Form Phenomenon

Mladen Jovanovic

I have had the fortune to develop a great correspondence and 'distance' friend in Mladen Jovanovic. Mladen has a deep understanding of the training methods which were pioneered in (his home) Eastern Europe. What you will review here is an introduction by Mladen on the significance and special characteristics of sport form. Following his introduction is Mladen's translation of a segment of a text authored by his professor Vladimir Koprivica.

Mladen has told me that Professor Koprivica is a good friend and colleague of the great Soviet coaches/strength scientists Matveyev and Verkhoshanski. Professor Koprivica's insights deserve our very special attention.

It is my pleasure to announce that both Mladen and Professor Koprivica have agreed to be interviewed by me for www.elitefts.com and www.powerdevelopmentinc.com

Keep in mind that Mladen's native language is not Latin based. His excellent grasp of the English (Latin based) strength science vernacular alone is nothing short of spectacular. Furthermore, Professor Koprivica does not speak English. Mladen has volunteered his own time to translate the Professor's work for those of us who are not fluent in Serbian.

Stay tuned for a series of featured interviews with Mladen and Professor Koprivica in which they may provide viewers with their valuable insights.

James Smith

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about the author

Mladen Jovanovic is a student of strength training and conditioning at Faculty of sport and physical education at University in Belgrade, Serbia and Montenegro. He used to program in various languages (C/C++, Assembler, Qbasic, MATLAB, Mathematica) during a high school and later. He engaged into training in various martial arts including Brazilian jiu-jitsu and vale tudo. Mladen never reached competitive level, so he decided to become a coach. His prime interests are in coaching sciences including biomechanics and motor control. He also loves to read, run and most important he enjoys iron game. Mladen is also active member of charliefrancis.com (his nick is duxx) and can be reached there or via e-mail: duxx82@gmail.com

unfortunately, prof. Vladimir Koprivica is not familiar with English language, and I am

not familiar with his e-mail.

As an active member of various sport discussion forums, and a reader of elite sports and training websites, I noticed that the „westerns“ aren't familiar with sport form. When I say „aren't familiar“ I don't mean they didn't experience it, but they rather lack the knowledge and experience identifying and controlling it.

Every coach knows that it is impossible that their players perform at their top shape for prolonged period of time without over-burning, injuries and lack of motivation which finally result in fall of their performance. Some coaches have developed excellent methods and principles in planning and programming of athlete preparation process (which consist of training, competition and recovery which is in most cases under-appreciated part) taking into consideration this phenomenon. They maybe call this phenomenon with different names, but in Eastern Europe it is called sport form!

There are two types of sport form: individual and team sport form. Individual sport form is most noticeable and the easiest to control, but team sport form is very hard to control, but in the same time, if you currently suck as a player, your team colleague can cover your ass, so basically, team form is bigger than the sum of individuals sport forms, making it more complex. More on this topic later.

Russians have made a huge effort exploring and controlling this phenomenon. Note that they didn't invented it, they explored it (same as Mount Everest – it is not invented, it is discovered, but it was there all the time where it is still now). As stated before, this doesn't mean that a lot of coaches aren't familiar with it, just they are not familiar with the research done by the Russians, which in turn can help them to

- Identify the state of sport form
- Predict the behavior and results of their athletes on major competitions
- Control sport forms, and as a result control performance of their athletes
- Improve their planning and programming of athlete preparation process and thus increase their performance when it counts the most

For this very reasons, I find that it is very important that „western“ coaches (and the gross of our own European coaches) familiarize with the sport form phenomenon and its impact on performance, planning and programming of athlete preparation process which in turn can help them to create better players and better results at the most important competitions.

I would like to notice, that I am not an expert on this subject, and I don't find myself as an authority to talk about it, because I still lack of great practical experience which is my biggest shortcoming. For this very reason, I am very glad that I have a permission from my teacher and mentor prof. Vladimir Koprivica to translate a whole chapter from his outstanding textbook for our Training Theory course.

Well, here it is...

SPORT FORM

Sport form is a term that is very often used in scientific and expert literature, news, radio and TV reports, in the discussion between experts, coaches and athletes. Most of them, without regard on their expertise, can evaluate is some athlete or team in sport form or not, but only very versed experts know principles of its development, its phases, durations, components, and which is most crucial, can manage/control sport form and predict its course.

What is sport form? One consider it is just one moment in the athlete's career, when he reach his maximum/best result(s); second consider it as a state of preparedness that allows successful performance on competitions; third as a state of athlete in one period when he attain high and stable results etc. Most of experts accept that sport form is a state of optimal preparedness for sport achievements which athlete acquire/attain with adequate preparation on each new level of sport perfection. So, sport form is a state of optimal (best) preparedness, but in the same time it is a process, because it changes during athlete's career parallel with sport improvements with each individual. Simply stated, we must differ sport form in pioneer, cadet, junior and senior stages of athlete's career, because every following stage represents its bigger level. With the consideration of sport form definition, it is clear that it is not correct to state that athlete or team is in „bad, poor form“. So, athlete or team ARE or ARE NOT in the state of sport form.

To be in the state of sport form, and in the right time, is the most crucial task which should be solved during training process by coach and athlete(s)! Only if they successfully solve this task/problem, athletes can achieve adequate, desirable and planned result. Majority of athletes during the season (year) accomplish to achieve the state of sport form, but only the minority of them achieve it in the right time – during the very most important competition. Unfortunately, some athletes does not achieve neither one possibility, so according to competition look/respect, it is lost year. Exception to this is when elite athletes who purposely set their year training plan and competition calendar, to allow rest and recovery after multi-year hard training and competitions (for example it the year following Olympic Games).

Primary criterion by which sport form is evaluated is the result on competition. Competition is the best test, because it integrates all the components of sport form. In the sport branches, in which the result is exactly/objectively measured (for example in meters or seconds) this is relatively easy to do. Prominent soviet athlete, coach and scientist, Bondarchuk, mostly everyday have recorded results of hammer throwers which he coached, and by this method he managed to track down and direct/control their sport form. It is well know what results were achieved by his athletes on major/biggest competitions. However, in gross of sport branches (for example in sport

games, martial arts, sport gymnastic etc) evaluation of sport form is substantially complex, because along with numerous external factors, result depends also on the quality of sport opponents. In this case, the most reliable evaluation of sport form of the athlete or team can give coach (or couple of them). However, this can be also done by experienced athletes.

One renowned soccer player is asked how does he know is he in the state of sport form or not.

„If I am not in the state of sport form during a game I got only one solution. When I am in the state of sport form – I got three. “ – he responded

„But what if the opponent reads all three of them? “ – he was asked again

„Well, in that case he receives a goal, because then I do very unexpected move and pass the ball to my team player, so he has a easy chance to score!“

From this short, but comprehensive, interview, couple of conclusions can be carried out. It should be emphasized that athlete who is in the state of sport form is able to be creative, to create and display what is later remembered, described and retailed. Beside that, athlete function at the level which is not otherwise accessible to him, he train with such an ease, he easily withstand great physical efforts and solve technical/tactical tasks, he recover quickly, it is very motivated, wish to compete and believe in his own possibilities, he believe in success.

Basic components of sport form are physical, technical, tactical and psychological (mental) preparedness. Beside them, pedagogical (educational) preparedness is usually mentioned. If those mentioned components are on necessary level, it can be said that the athlete or team is in the state of high preparedness (srp. Treniranosti, *I had trouble translating this*).

It is not a question that high level of preparedness is a basic requirement of sport form. However, sport form and high level of preparedness should not be indentified as same/synonyms. Some athletes or teams can be very well physically, technically, tactically and psychologically prepared, but without being in the state of sport form. Preparedness is a fundament of sport form, but the state of sport form requires harmonically/harmony unity/oneness/cohesion/integration of all its components. This unity/harmony is achieved through competitions, and because of that there is the axiom: There is no sport form without competitions! A lot of elite coaches have such a system of preparations for most important competitions (for example Olympic games) in which they prepare their athletes with participation on numerous competitions.

Under all normal training and life conditions of an athlete, the level of preparedness, during a short period of time, cannot be substantially changed. However, athletes often,

within very short period of time (for example 7 days) perform very dissimilar/differently: once they perform outstanding and once very poorly. What is the matter, athletes and coaches often question. It is evident that there happened violation/breaking-out of harmonica relation between components of sport form or the operative components have changed, which are in contrast to level of preparedness very accessible/liable for faster changes. This happens to be in the frame/realm of psychological (mental) preparation.

For example, it is very hard to maintain athlete's motivation and concentration for every subsequent/following competition. It is well known that the biggest fear of coaches in team sports (games) is those matches that are „won in advance“. And chess players says that it is the most hardly to win „the game already won“. Beside that, perturbed athlete-athlete, athlete-coach, management-coach, management-athlete etc. relations can also perturb/violate the sport form or even to disable athletes to reach it during the season. In that situation, change of coach (which is mostly done), or some other change, may sometimes positively affect on the fast re-establishment of the sport for, if the last coach was done a good job on athlete preparation. New coach – „miracle maker - miraculous“, in short period of time cannot substantially improve the level of athlete preparedness (sport form fundament is built very long, slowly and patiently) but he can bring the operative components on the necessary level and re-establish their harmonical relation. If the athletes are „uncared – rusty“, or in other word very poorly prepared, the miracles don't happen, apropos, it is impossible to quickly achieve desirable results.

There is a need for great patience, great knowledge even an intuition to bring everything in order. To new coach, beginning of work in the middle of the season is incomparably harder than at the beginning of preparation period, so experienced coaches very carefully chose this option, because the risk is great. In those cases, the basic orientation must be to the selection of the most important factors of sport results in concrete sport branch and very directed, carefully dosaged, specialized work. A great clutch (?), or solving of the larger number of training tasks, typical for preparation period, requires a lot of time, and as a rule, there isn't much of it.

Every sport branch has differently ranked factors that determine success in it. In cyclical sport branches, like cycling, long distance running, rowing etc., dominant factor of success is appropriate type of endurance, while the tactics contribute much less. In team sport games or in martial arts, tactics is very important and have equal significance with other important factors (physical, technical and psychological preparedness). In some sport branches, the most important factor is sport technique (skill) etc. Sport form depends on the level of dominant factors, so their development should have great attention in training process.

It has been noticed that sport form has physical (cyclical) character. There are three phases that differ:

1. Phase of entrance into the sport form,
2. Phase of maintenance (relative stability) of sport form and
3. Phase of temporary lost of sport form.

In phase one, emphasis is on the development of sport form fundament, from which quality depends sport form level. In the beginning, with more volume, there is a separately development of physical and technical/tactical qualities of the athlete, but with progression they are more and more incorporated into competition exercises (for example, soccer players play on two goals, judokas and karatekas sparing/fight etc.) Phase of entrance into the sport form lasts differently and it is often determined/dependent on the competition calendar. If it lasts shorter, the shorter will be also the second phase – phase of sport form maintenance. Because of this, strenuous specific work, with larger relative volume of competition exercises in overall volume of training process, can relatively quickly introduce athletes into the state of sport form, but then we cannot count on its longer maintenance. This method is justifiable/reasonable in the case where the competition season begins with the series of very important competitions/matches, like qualification matches for the European championships in team sport games. In opposite situation, if the major competitions start later in the season, it could easily happen that in the beginning of competition season, athlete (or team) perform very successfully on less important matches/games/competitions, but perform poorly on the main/major ones. It is common that among ones that have trained „like never before“, sport form is „depleted“ during the preparatory period and during couple of opening official competitions/matches/games, and after that there is only headlong fall, which is very hard to stop.

From the above written, it can be clearly seen that the phase of entrance into the sport form coincide with preparatory period. However, there are exceptions to this rule. If the coach really controls the sport form, depending on the competition calendar, coach can extend the entrance phase on the first part of competition period. In this case, first games/matches have purpose of preparation and control and lead athletes to higher level of sport form. But, because in some sport branches the points are given on these competitions, this approach has certain risk. Reasonable coach and athlete know that it is un-avoidable/necessity to sometime loose on less important competitions to achieve master goal later. There are well know reversed/contrary situations from sport practice, where coach and athletes „attacks“ the less important records, that are measured only by statistics, and then „unfortunately“ loose important trophy from objectively inferior opponents.

Determination of the main goal in the season requires realistic assessment/evaluation of athlete or team capabilities. Athletes of lower level should pursuit their chance on less important competitions, when they should plan the sport form. It is realistic to assume, that those competitions will have a preparative purpose for elite athletes, and

this means it is possible to win them. However, in team sport games, where the point is given on each competition/match, this orientation (to win the best for any cost) can be fatal. There is an example of soccer team, rookies/newbie in the first league, who made a series of result surprises. It had a positive point score with the members of „great fours“ – and fell out of the league! On their home games, they lost every game with direct rivals for the league rebellion/staying, and this loss could not be compensated with the success against better opponents.

The second phase of sport form is also usually called the phase of relative stability, because the athlete results principally oscillate. It is considered that athletes in cyclical sport branches (except long distance runners) are in the state of sport form if they achieve results not less than 98%, and that acyclical speed-strength athletes 95-97% of their best result. In the best case, the athlete achieves his best result, best game, and best match on the most important competition. It happens that a large number of athletes achieve their best performances after main competitions, or that team, after a series of matches/games, thanks to them, enter the state of sport form, but when it is already late. Coaches, who are not familiar with principles/rules of sport form development, often state for the news papers that it is pity that the championship is finished, because his team is just now in the state of sport form. Those coaches do not control the processes of sport form development, but it appears beside their will, and as a rule of the thumb, in most un-important time.

Second phase of sport form usually coincide with competition period. First problem appears if the competition period lasts long, because sport form can only last for 2-5 months. For this very reason periodization of sport training is justifiable with two or more shorter competition periods, with in-between rest vital for athlete regeneration and their preparation for second part of competitions. Second problem arises when there are two important parallel competitions, which is the case with cup competitions and regular championship in team sport games. Preparations for cup competitions disturb regular preparations for matches, and put the coach in the dilemma what should be appropriate goal. Similar problem are preparations for play-off.

It was already emphasized that there is no sport form without competitions, but in the same time competitions „deplete“ sport form. Too much of competitions can negatively influence sport form.

Third phase – the phase of temporary sport form lost principally appears. Sport form is impossible to keep for a prolonged period of time, because for the first reason, to allow athletes to achieve greater level in the following cycle, it is essential to „break-up“ old sport form and build a new one. As a second reason, it is not possible for the organism/body to constantly adapt, during a prolonged period of time, to constant great requests, because this road leads right to overtraining. Besides that, constant appearance of the same or similar training or competition content lead to psychological (mental) fatigue. Athletes become anxious, they lost their desire to train and compete,

they are hardly motivated, they fatigue much quicker, they fail to solve technical/tactical tasks, they complain about fatigue and insomnia etc. These are all signs of overtraining and unless they are significantly pronounced, the athlete state is reversible and will not go to leave health or sport (results) consequences.

Someone may ask how come that there are elite athletes that win most of time. Are they all the time in the state of sport form? Answer should be primarily looked/ searched in their great talent and hard work, but also in relatively poorer opponents, and because of that, without being in the state of sport form they are capable to win the gross number of their rivals.

The best world athletes, which have competitions during the whole year (particularly tennis players), prepares from competition to competition mainly using specific exercises and carefully picking/choosing competitions in which they will take a part – apropos, they themselves (with coach) create their own personal competition calendar and plan sport form during the season.

We should differ between individual and team sport form. It is much easier to control individual sport form, because in training process it is possible to individually dosage load, to regulate relationship between volume and intensity, ratio between general preparation, specific preparation and competition exercise, precision control of the effects of applied training and competition loads etc. However, errors in training process can be hardly corrected. In team sport games, sport form of a team is not a simple summation of individual sport forms. Team is not the collection of best individuals, but rather a union of individuals that best function as a whole. And from this comes, in most cases, an understanding of coach's decisions to keep the best player in reserve. Coaches, in team sport games, have an option to substitute the player which is not in the state of sport form with one that is. With this method, it is possible to extend team sport form. With the relation with already mentioned, it is possible to draw one more conclusion: it is possible that team, during a season, because of disharmonized interrelations among athletes, don't event enter the state of sport form or to be in it for very short.

It is very interesting question what should be the guide/orient to a coach of team sport games in planning forehand team sport form. All of the team members (athletes) are not equally important in this case. Coach should be oriented on those individuals who are the main „carriers“ of major competition weight/load and should control the sport training to allow them to reach state of sport form in the right time, because this is the best guarantee of sport success.

Athlete who is in the state of sport form, can be easily recognized according to following signs:

1. Quickly and easily starts training session, he easily withstand training loads,

especially often changes in intensity;

2. He is able to perform a specific muscle work on a such high level of strength, speed, endurance and dexterity/coordination/agility (srp. Okretnost) which is not available to him when he is not in the state of sport form;

3. He is very economic in training, or in other words, he spend much less energy for the same work;

4. He functions at higher level of technical/tactical preparedness; without any problems and very rationally uses all the „arsenal“ of skills he poses; He easily switch from one exercise to another and improvise in training and in competition; he make much less errors;

5. Faster new skill acquisition;

6. After the training and competition, his body functions recover much faster:

7. Athlete is in positive emotional state, he got very pronounced desire for exercising, he is in „fighting“ mood, he believes in his own abilities and wish/desire to compete and

8. Attain better results.

This was the translation of whole chapter regarding sport form, from pages 79. -85. in

Koprivica, V.J. (2001). Osnove sportskog treninga. I deo. Izdanje autora. Beograd.

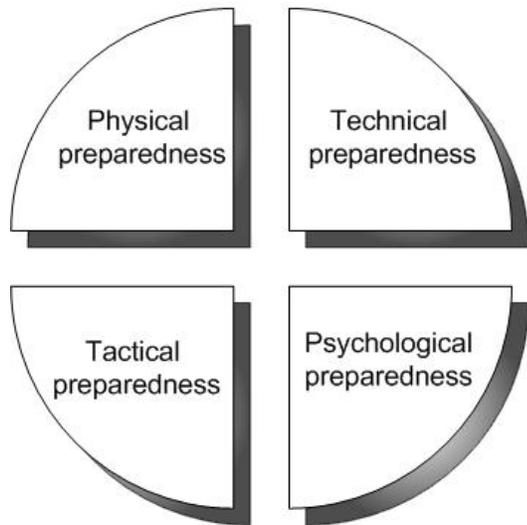
There are still a lot of things to talk about sport form, especially about ratio of general/specific/competition means which is the crucial aspect of training that control the reaching, maintaining and „breaking-up“ of sport form. This important issue would be covered in another article(s).

Maybe some readers would be confused what is general/specific and competition exercises (means). Well, they are synonyms with James Smith classification of General/General Specific/Specific means. It must be stressed that those are NOT a discrete groups, but rather continuum as depicted.

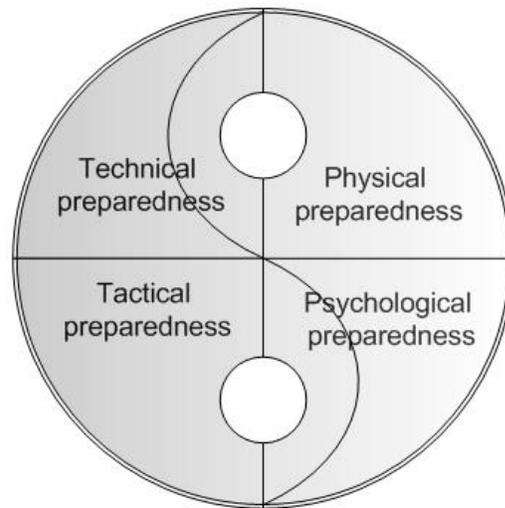


I also depicted the different between sport form fundament (components) and sport form itself.

Fundament for sport form



Sport Form



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