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of VI International Scientific Conference of Students and Young Scientists “Modern University Sport Science”

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This publication contains materials of VI International Scientific Conference of Students and Young Scientists "Modern University Sport Science". This publication considers issues of theory and methods of physical education, social aspects, sports biomechanics, physiology, history and theory of sport. This publication is intended for those working in the field of physical education and sports, representatives of Higher Educational Establishments, students, post-graduates, coaches and athletes.

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Section I

Basics of Theory and Methods of Physical Education and Sports, Sports Pedagogics and Sports Psychology
TECHNOLOGY OF TEACHING OF SPORTS TECHNIQUE FOR EXERCISES WITH COMPLEX MOVEMENT STRUCTURE

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Introduction
The process of teaching complex exercises along with a constantly rising level, quality and stability is getting more and more difficult. It is necessary to apply new techniques for a better analysis of the structure of sports exercises in order to identify the most significant elements of a particular movement. Information concerning the most characteristic and the most significant, from the point of view of teaching the movement, stages of a physical movement is necessary to prepare effective training programs. Identifying such stages, described in literature as key elements of sports technique, should be an initial step to prepare pedagogical technologies of training.

Aim of the work
Therefore, the aim of the paper was to describe an effective pedagogical training technology of the process of teaching acrobatic exercises.

Material and methods
For recording of 9 master class acrobats a JVC GR-DVL 9800 NTSC video camera (operating with frequency of 60 Hz) and cinematographic analysis system (APAS 2000, Ariel Dynamics Inc.) were used (age = 11÷25 y, body mass = 67 ± 5 kg, body height = 177 ± 3 cm). Reflective markers (n=17) on the subject were positioned. All marker positions were tracked and reconstructed using the APAS system. Video cameras were placed in key position, 90 degrees to the plane of the path tumble. Dimensions of known factors on the field and various other measured objects in the field of view were used for the calibration points. The video pictures were grabbed and the files were stored in Audio Video Interlace format (AVI). The data coordinate endpoints were then smoothed using a second order low-pass Butterworth digital filter with a 10 Hz cutoff frequency. The 17 data points were digitized (left and right): foot, ankle, knee, hip, foot, wrist, elbow, arm, hand, and center of the head. Composite control cube consisting of 8 points and 17 data points were digitized and entered into the 2 dimensional linear transformation (DLT) module and converted to real displacements. Angles of body segments, velocity of body segments (horizontal, vertical and resultant) and their trajectories as well as the length of acrobatic jump phases were studied.

Results
Based on the research it was concluded that pedagogical technology of teaching includes three components: the first one – a biomechanical analysis of phase structure of movement, the second one – didactic teaching structure, and the third one – contemporary teaching technology including algorithms as well as programs of teaching acrobatic exercises.

The results of a 6-month pedagogical experiment which was carried out by means of parallel-group technique showed that the experimental group was superior
to the control one. After the experiment it turned out that experts’ notes given to the acrobats from the experimental group for performing junction elements were statistically better than those of the control group. An average note of the experimental group for performing starting body position (LP)(Fig. 1a) was 28% higher than that of the control group (p<0.05). "Straight” position and its multiplication (MP)(Fig. 1b) and final position (FP)(Fig. 1c) were also given higher notes. The average results in MP were better by 33%, whereas those in FP were higher by 29.5% (p<0.05).

Conclusions
1. It was agreed that teaching the round-off straight back somersault with the use of pedagogical technology of training is more effective than a traditional way of teaching (p<0.05).
2. The acquisition of key elements of technique provides a positive transfer to perform the whole exercise or its profile (e.g. straight back somersault - double straight back somersault).

References
THE ANALYSIS OF DOUBLE SALTO BACKWARD TUCKED AND DOUBLE SALTO BACKWARD STRAIGHT PERFORMED BY ELITE ACROBATS

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INTRODUCTION

‘Technique analysis’ is the term given to an analytical method that is used to understand the way in which sports skills are performed and, through this understanding, provide the basis for improved performance.

AIM OF THE WORK

The aim of the study was to compare the key elements during the performance of double salto backward tucked with a double salto backward straight.

MATERIAL AND METHODS

Seven top level acrobats (track jumpers) participated in the study. Mean values of body height, weight and age were as follows: 170 cm±4.0 cm, 72.4 kg±3.6 kg, 20.4±1.7 years, respectively.

Two digital video cameras (240 Hz) and APAS 2000 (Ariel Dynamics Inc.) were used during the study. Markers were placed in ankle, knee, hip, arm, elbow and wrist joints. All marker positions were tracked and reconstructed using the APAS system. The first one video camera was placed in key position, 90 degrees to the plane of the path tumble, the second perpendicularly to the first one (Fig. 1). Dimensions of known factors on the field and various other measured objects in the field of view were used for the calibration points. The video pictures were grabbed and the files were stored in Audio Video Interlace format (AVI).

![Fig. 1](image)

Two control tasks were performed by top level athletes – acrobatic jumping exercises on the track: the first one – round-off – flick-flack – double salto backward tucked, the second one – round-off – flick-flack – double salto backward straight.
Values of joint angles, velocities of the body segments, CG (center of gravity), time of exercises execution and body posture were estimated and analyzed. Error of distance measurement was estimated on 3.0%.

**Results**

Drawing on the biomechanical analysis of the routines of double salto backward tucked and double salto backward straight performed by elite acrobats the following key elements were singled out: starting body position (SBP), body multiplication position (BMP), landing body position (LBP).

It was observed that in starting body position of double salto backward tucked an acrobat assumed a stiff body position. Starting body position is characterised by the following joint angles: shank-thigh – $179^0$, thigh-trunk – $177^0$; trunk-uparm – $115^0$; time 0.633s (Fig 2a). While performing double salto backward straight an acrobat demonstrated a springy-stiff starting body position (joint angles: shank-thigh – $170^0$, thigh-trunk – $184^0$; trunk-uparm – $178^0$; time 0.583s)(Fig. 2b).

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**Conclusions**

1. The following key technique elements in two routines were singled out: starting body position, body multiplication position and landing body position.

2. Starting body position during performing double salto backward tucked is characterised by the following joint angles: shank-thigh – $179^0$, thigh-trunk – $177^0$; trunk-uparm – $115^0$; time 0.633). While performing double salto backward straight an acrobat demonstrated a springy-stiff starting body position (joint angle: shank-thigh – $170^0$, thigh-trunk – $184^0$; trunk-uparm – $178^0$; time 0.583s)
3. Biomechanical indices of performing the starting body position in double salto backward tucked and double salto backward straight determine an effective technique of dynamic exercise links.

References


THE BALLROOM DANCERS ATHLETES: PSYCHOPHYSICAL PROFILE AND CHARACTERIZATION OF EFFORT DURING SIMULATED BALLROOM COMPETITION

Cicchella Antonio, Andrea Giovanardi, University of Bologna
Alina Klonova, Latvian Academy of Sport Education, Riga, Latvia
Helena Liiv, University of Tartu, Estonia
Toivo Jurimae, University of Tartu, Estonia

Aims of the study is to provide physiological reference data for high level ballroom dancers, to study the relationships among these variables, to characterize the effort during ballroom dance competition and assess their psychological profile during the competition season. Only few studies exists on ballroom dancers, who describes their physiological characteristic with the aim of set a model of performance in this sport

Some of the studies provided oxygen consumption and post exercise lactate data of ballroom athletes (1and 2), but they don’t mention the qualification level of the athletes neither considered other characteristics. There is a lack in literature about physiological characteristics of the top level sport dance athlete. Also any studied considered other characteristics, as agility, jumping capacities, general strength and balance, that could be important to establish a model of the performance and could help athletes and trainers to improve their work.

Methods. A group of 16 highly skilled competitive ballroom dancers - 8 males and 8 females - (mean age and standard deviations 24,1 /3,4 years, body height 171,89/7,2 cm, weight 61,7/8,1 kgs) were included in the study. Mean world ranking of the subject were 1657 (range 1503-1845, standard deviation 89) IDFS (International Dance Sport Federation) points, thus referring the athletes in the top 1% on 2469 listed in the rank. The couples danced together since 29,4 months (sd 32 mo) and had 15 (sd 5) years of dancing experience. They were tested for the following parameters:

Maximal hand strength (Jamar hand dynamometer), Sit ups (max number in 30’), Jump Height (Squat Jump and Counter Movement Jump on a conductive mattress), Flexibility (seat and reach test), Illinois Agility Test. In addition, Heart rate (Polar, Finland), Blood Lactate (Lactate Pro portable lactacidometer), Maximal Oxygen Consumption (K4b² Cosmed, Italy) during and after (Lactate) 3’ and 5’ incremental running test at exhaustion on the treadmill and during and after the simulated ballroom competitions. Body balance was assessed before and after the simulated dance competition with a 30” Flamingo balance test (one foot at time, eyes open) a Kistler force platform and Sway software v. 3.1 (BTS, Italy) was utilized for the analysis. Ballroom competition consisted of one trial of 11 minutes which included the 5 standard dances with 2’ interval between them.

Results and Discussion. Strength, flexibility and balance data are shown in Tab.1. We found statistical significant difference at Student T test between males and female, for height (t= 7.9 p= 0.001), weight (t 4.2 p= 0.001), VO2 max (t = 5.3 p= 0.001)
0.006), maximal speed on the treadmill (t = 6 p = 0.004) and hand grip (t=4,6 p= 0.006).

Sway was calculated as the mean of the two feet in the longitudinal direction, before and after simulated dance competition. Any statistical difference was observed in the balance before and after dance and between males and females. The subjects appears on the means to have a low elasticity index (CMJ minus SJ = 3 cm).

<table>
<thead>
<tr>
<th>Tab. 1</th>
<th>Dom. Hand</th>
<th>Squat Jump</th>
<th>CMJ</th>
<th>Sit Ups</th>
<th>Flexibility</th>
<th>Agility</th>
<th>Sway</th>
<th>Sway</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strenght</td>
<td>Height</td>
<td>Height</td>
<td>n.</td>
<td>cm</td>
<td>Sec.</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>units</td>
<td>Kg</td>
<td>cm</td>
<td>cm</td>
<td>n.</td>
<td>cm</td>
<td>Sec.</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>Mean</td>
<td>40,5</td>
<td>33,4</td>
<td>36,5</td>
<td>23</td>
<td>13,7</td>
<td>17,6</td>
<td>33,71</td>
<td>47,2</td>
</tr>
<tr>
<td>Max</td>
<td>56</td>
<td>41,4</td>
<td>49,4</td>
<td>29</td>
<td>20</td>
<td>19,1</td>
<td>42,77</td>
<td>69,3</td>
</tr>
<tr>
<td>Min</td>
<td>30</td>
<td>27,7</td>
<td>29,1</td>
<td>20</td>
<td>2,5</td>
<td>16,5</td>
<td>25,2</td>
<td>36,2</td>
</tr>
<tr>
<td>Sd</td>
<td>8,7</td>
<td>4,6</td>
<td>0,7</td>
<td>3,1</td>
<td>5,1</td>
<td>0,9</td>
<td>5,8</td>
<td>10,4</td>
</tr>
</tbody>
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In next table 2, heart rate values are reported. Maximum HR achieved during simulated dance competition, is equal to 86% of maximum HR measured during incremental test on treadmill at exhaustion.

<table>
<thead>
<tr>
<th>Tab. 2</th>
<th>HR Max Dance</th>
<th>HR Utilization Dance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bpm</td>
<td>Bpm</td>
</tr>
<tr>
<td>units</td>
<td>Bpm</td>
<td>Bpm</td>
</tr>
<tr>
<td>Mean</td>
<td>196</td>
<td>170</td>
</tr>
<tr>
<td>Max</td>
<td>212</td>
<td>187</td>
</tr>
<tr>
<td>Min</td>
<td>176</td>
<td>154</td>
</tr>
<tr>
<td>Sd</td>
<td>10,6</td>
<td>10,6</td>
</tr>
</tbody>
</table>

These data are confirmed also by the level of lactate found after the simulated dance competition, as shown in the following table 3 and by the % of maximum lactate value in relation to the maximum lactate measured after the maximal running test on the treadmill:

<table>
<thead>
<tr>
<th>Tab. 3</th>
<th>Blood Lactate</th>
<th>Blood Lactate</th>
<th>Blood Lactate</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>post dance</td>
<td>post run</td>
<td>Utilization in Dance %</td>
</tr>
<tr>
<td>units</td>
<td>mmol</td>
<td>mmol</td>
<td>%</td>
</tr>
<tr>
<td>Mean</td>
<td>8,4</td>
<td>10,1</td>
<td>83,1</td>
</tr>
<tr>
<td>Max</td>
<td>13</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>Min</td>
<td>4</td>
<td>6,7</td>
<td>59,7</td>
</tr>
<tr>
<td>Sd</td>
<td>2,8</td>
<td>2,3</td>
<td>138</td>
</tr>
</tbody>
</table>

VO\textsubscript{2} percentage utilized in dance respect to VO\textsubscript{2} max, shows values clearly
above the anaerobic threshold, also if they have to be sustained at maximum for two minutes. However, two minutes are not enough to allow full recovery between the dances styles. Maximal speed achieved during the treadmill test was 16.40 km/h (sd 1.34) for males and 14 (sd 1.22) for females.

<table>
<thead>
<tr>
<th>Tab. 4</th>
<th>VO₂MaxRun</th>
<th>VO₂Dance</th>
<th>VO₂ Utilization in Dance</th>
</tr>
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<tbody>
<tr>
<td>units</td>
<td>ml/kg/min</td>
<td>ml/kg/min</td>
<td>%</td>
</tr>
<tr>
<td>Mean</td>
<td>53.5</td>
<td>47.6</td>
<td>88.9</td>
</tr>
<tr>
<td>Max</td>
<td>75</td>
<td>61.6</td>
<td>82.2</td>
</tr>
<tr>
<td>Min</td>
<td>36.2</td>
<td>23.8</td>
<td>65.9</td>
</tr>
<tr>
<td>Sd</td>
<td>12.3</td>
<td>11.08</td>
<td>89.7</td>
</tr>
</tbody>
</table>

VO₂ in dance is affected by the years of dance together (r= 0.80 p = 0.05) more than the years of dancing experience ( r = 0.64 p = 0.05). Body balance was the only parameters (longitudinal sway, measured both before and after the simulated competition) who shows correlations with the world ranking points of the athletes ( r = 0.569 ;  p = 0.034 and r = 0.637;  p = 0.14), thus indicating balance as the discriminator variable in identify higher level athletes.

Linear regression analysis (SPSS v. 14.0) shows that World Ranking Points can be estimated from two variables : Age and Balance, following the equation : y = 9.74 x age + 5.819 x balance + 1152.624 (R² = 0.714).

A Rest Q questionnaire was filled by the athletes prior to start the testing session. The questionnaire assess the level of stress and recovery in the three days before the competition. It consists of 19 scales. We found that body balance was negatively correlated with Emotional exhaustion ( r = -0.0587;  p = 0.027) ; Emotional stress ( -0.625 ;  p = 0.017) ; Physical complaints ( -0.757;  p = 0.002) ; Disturbed breaks ( -0.690 ;  p = 0.006) ; Lactacte level after dance ( -0.586; 0.035).

Physical complaints shows a direct relationships with training hours per week (0.0589 ;  p = 0.27). Physical recovery show to be connected negatively with VO₂ max ( - 0.565 p = 0.025), being the athlete with higher VO₂ max having a slower recovery (due probably to training intensity). Interestingly we found the general body flexibility (seat and reach) to be connected with emotional exhaustion (0.611:  p = 0.020) and with self regulation scales (0.617:  p = 0.019).

Conclusions. Data can be helpful for understanding the performance model of this sport, for customize physical training programs for sport dance as well for matching the couples and monitor their physical progresses. Increasing of elasticity and body balance is recommended for dance sport athletes. Psychophysical relationships have been investigated in their relationships with physiological dimensions.

References:


SPECIFICS OF THE TRAINING PROCESS OF SENIOR LEVEL CHESS PLAYERS

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Introduction. The scientific work of the famous Soviet scientists, L.P. Matveev, E.P. Ilyin, V. Platonov, A.M. Maksimenko and others argued that chess as a kind of competitive activity, belonging to abstract games by Sportsmen, the outcome of contests in which to a great extent are determined by the player is not an asset. This feature of the game of chess, of course, has determined influence on training, which unlike other sports, occupies a special chess training, physical trainings and only is task of developing character.

Methods. It is known that the development and spread of chess is beginning to develop and methods of preparing players for competition also.

As the general chess theories were put forward there were new demands for the level of preparedness of a chess player. Chess analysis of the leading chess player of the 18-19th century: A.F. Philidor, A. Petrov, V. Steintz, Em. Lasker, G. Staunton, Z. Tarrasch, expanded the range of mandatory knowledge of chess, owning that it was possible to substantially increase the practical playing strength. This applies not only to the openings and middlegame, but is also evident in the opening of the basic laws of strategy games in the endgame positions.

This greatly expanded the understanding of the principles of positional play, extending their half-open and also closed openings of the first world champion V. Steintz. His teachings formed the basis of modern views on chess strategy.

The results. Practical realization of a systematic approach to the preparation of chess players was embodied in the 30s of last century, with many Soviets, but greatest success associated with the use of this system accords with M.M. Botvinnik without any doubts. In the article "XI All-Union chess championship" (1939), he examines their methods of preparation for this contest and the results that were, in his opinion, the result of this training. Botvinnik expands on the content of the special chess training, in which large importance attached to the analytical work, training parties, working on the debut, and the study of style of play of their future opponents.

In general, the training system Botvinnik consisted of specific tasks which were possible only in the integrated application of certain elements of the system. The specific objectives he included in training in situations, were maintaining physical strength and mental stability of the entire distance of the tournament. and proper organization of work and rest.

Talk. Study on the scientific system of training senior level players continued with Alatortsev V.A. In particular, he noted the need for the creation of an integrated methodology training time players of the series, the development of chess events, makes it possible for players planning their obligation to responsible competition to improve. In their works. V.A. Alatortsev noted that the process of coaching chess consists of general and specialized training that interact interrelated with each other.
General training is aimed primarily at the comprehensive chess education and development of the necessary qualities chess player. Special training of chess implementation is in direct connection with the mastery and perfect craftsmanship on the basis of already acquired skills and general training. He wrote: "Due to the increasing level of technology chess art at international competitions, it is time to review some significant issues in the methodology adopted in our training."

A scientific approach to the demands of modern chess training methods is impossible without studying the practices and creative views strongest players in the world. In his paper "On the chess and chess players" (1930) Austrian grandmaster R. Spielman wrote: "Preparing a tournament chess player in a sense is more difficult than their own chess games. Training should be combined in one subject are acquired during the long time of knowledge and skills ... An equally important part - the physical training. The physical state of a chess player in the tournament depends just as much as the spiritual. " Increased attention was paid by R. Spielmann to tactics of "differentiated training" to one or another partner pending on the analysis of the parties, psychology and tactics of match tournament, or fight, mood and other individual factors, comparing to the sport of chess game with several other sports.

The process of chess training, in our opinion, should consist of the following interrelated and interacting parts of the general and special training: theoretical, technical, psychological, moral, and physical.

The basis of chess training, athletes should be included in the to first place the development of qualities such as mastery analysis, combining ability, special memory, attention, will to win, and endurance".

But even more important in the preparation of the change is now talented research, coaching and teacher leadership, which are closely connected with the moral and physical training of athletes.

Scientific development of these issues in the field of chess can have multiple destinations. But it should be based on the main provisions of Russian chess school. Scientific thought is to develop chess in harmony with those of related disciplines - psychology, physiology, and medical control. This has been achieved in many sports and was a successful confirmation at the Olympics and international competitions.

**Conclusion.** All advice given in this article, it is difficult to implement in full. Therefore, activities of daily living, coaches should proceed from the individual characteristics of students and choose the most effective forms and methods of training in a given period of time. If you want to educate a personality, then the approach to every student must be strictly individual. Seldom occurs, when chess player in on the way of sports which consists of only victory. Many of the road to the top of the chess Olympus are punctuated by successes and failures. Often hard work for a long time does not bring the desired results, and a brings desire to quit and give up. This is a common situation. Accumulate potential, acquire knowledge, skills and experience - then there is sure to be a breakthrough in a new quality to a new level of play. Goal-focused daily work will necessarily bear fruit.

**Summary.** If we use the standard in the sport concepts related connections with training methods, the preparation of modern chess, consider the following her
directions: sports-technical, psychological, physical (with medical supervision).

**Bibliography**

INNOVATIONS IN LONG-RANGE SHOOTING ACCURACY IMPROVEMENT METHOD FOR QUALIFIED BASKETBALL PLAYERS

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The improvement of playing actions in basketball is connected directly with the increase of shooting percentage. Improvement of shooting accuracy from the 3-point line allows a team to vary offensive tactics significantly, successfully overcome opposite teams resistance in case they are using zone defense (most common way of offence against such defense is long-range or mid-range shooting), diversify fast breaks and transition offense. Relevance of the problem is increasing due to the changes in official FIBA rules where 3-point range is now 50 cm further.

The objective of research is competition and training activity of qualified basketball players.
The main goals of our research are:
- to obtain data about the conditions of long-range shooting during game-time,
- to study the factors influencing the accuracy of shooting in basketball,
- to study existing methods of the long-range shooting accuracy improvement,
- to develop and experimentally confirm the method of long-range shooting accuracy improvement.

Conditions of long-range shooting during game-time were studied by analyzing game statistics of professional basketball league and students basketball association.

The research took place on the base of Russian State University of Physical Education and Tomsk Polytechnic University men’s basketball teams. Using the Polar team-system we have measured heart-rate (HR) of basketball players during the training session and have defined the HR criteria of definite exercises for long-range shooting accuracy improvement.

According to the obtained data the suggestions of dosing load for the exercises of long-range shooting accuracy improvement were made. Long-range shooting accuracy increased by 10 % in the experimental group. On the basis of the research the method of long-range shooting accuracy improvement was developed and experimentally confirmed.

The obtained results of our research allow to develop the method of long-range shooting accuracy improvement which could be suitable not only for students but for professional teams.
COMPARISON OF ELITE HANDBALL PLAYERS RELATED TO ATTACKING POSITIONS ON THE EVIDENCE OF PSYCHOLOGICAL INVESTIGATION

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Dr. Csaba Ökrös, Semmelweis University Faculty of Physical Education and Sport Sciences, Budapest, Hungary

In elite sport, as in case of handball, positive forming of performance is many-sided. As handball is a psychomotor activity (Ökrös, 2007), the performance of players in a match shows not only the technical-tactical and physical preparedness, but requires a high level of psychic activity, as well. This paper studies the mental abilities of men and women handball players in relation to the different attacking positions. The answers for the following questions were searched for: Has the level of aggressiveness an effect on ranking the players for certain positions? Does the emotional background influence the suitability for that position? Is there any correlation between the position of the players and his/her type of personality?

Literary review: Personality of players shows differences that determines their actions, motivations and attitudes on the court. The personality of the players has to be taken into consideration when choosing their posts, best matching their abilities.

Hypotheses: It was supposed that the assertive level of women is lower, than that of the men. The wingers are the least assertive. The men are more stabile from emotional point of view than women, and men goalkeepers have the lowest value in the neuroticism scale (on the emotional scale.) The last supposition was that handball players are extroverts.

Methods: The Eysenck Personality Questionnaire (EPQ) was used. 8-8 female and male professional handball team were examined (in 2009/2010 season). The results were processed with the Kriskal-Wallis Anova statistical method based on the EPQ. The results are demonstrated by diagrams and tables.

Results: The results show that the backcourt players have the lowest average in the psychoticism scale, but there are not significant differences between the males’ and females’ assertive level. There are significant differences between the neuroticism level of men and women. The pivots seem to be the most stable from the point of view of emotion. No significant differences were found between the posts. Each handball players has a higher than average value on the extroversio scale, so they are sociable people.

Conclusions: Handball rules allow the physical contact. Handball players should have a certain level of assertivity if they want to succeed on the court. The more stabile emotions of men are not surprising, as it has been already proven among civilians as well. The expectations that male handball players have an open personality were also met. It can be explained by the fact that if the players want to increase the performance of the team, they should form situations from the elementary to the highest tactical solutions together, in unison.
INFLUENCE OF SPORTS TOURISM ACTIVITIES ON LEVEL OF PHYSICAL PREPAREDNESS AND PSYCHOLOGICAL STATE OF 10-12 AGED BOYS

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Introduction. Nowadays sports tourism got social, health-improving and sports meaning. Sports tourism activities are an effective mean of physical improvement, education and development of teenagers. Education, training and development is realised during the organization of a collective camp life on a sports route and the activity of pupils under natural conditions that is especially important under the conditions of increasing hypodynamia of pupils with its negative impact on their health.

Active movements outdoors helps to strengthen organism and improve health. Walking with regulated loads strengthens one’s cardio-vascular system. Tourism helps to stir up inquisitiveness, to develop volitional qualities. Introduction with new regions, the environment, meeting people enrich an individual. Tour life develops power of observation, intellect, bravery, resolution and independence. That is why physical education and the sports tourism are able to considerably improve the process of children’s social adaptation.

Methods. To determine influence of tourism classes on level of children’s physical preparedness we used state assessment tests of fitness of the Ukrainian people, motives for sports engagement were detected using method «Motive researching of taking up sport».

Results. Tourism classes taken during the initial period of training allowed to improve results of boys of 10-12 in all indices, except 60 meters run and forward trunk flexion from a sitting position. Results in these indices had positive changes during two years, but reliability hadn’t been revealed (table 1). Increasing of results in majority of tests corresponds to the aims for athletes of this age, i.e. development of physical qualities.

<table>
<thead>
<tr>
<th>Indices</th>
<th>Before trainings (10 years)</th>
<th>After a year of trainings (11 years)</th>
<th>After two years of trainings (12 years)</th>
<th>Grade of probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapidness: 60 m. run, sec</td>
<td>10,9±0,36</td>
<td>10,1±0,33</td>
<td>9,9±0,34</td>
<td>( t_{1,2}=1,64; p&gt;0,05 ) ( t_{2,3}=0,42; p&gt;0,05 ) ( t_{1,3}=2,02; p&gt;0,05 )</td>
</tr>
</tbody>
</table>
Endurance: 1500 m. run, sec | 516,5±20,32 | 483,0±17,43 | 459,3±16,88 | t_{1,2}=1,25; p>0,05 | t_{2,3}=0,98; p>0,05 | t_{1,3}=2,17; p<0,05

Flexibility: forward trunk flexion from a sitting position, cm | 3,6±0,66 | 4,5±0,54 | 5,1±0,46 | t_{1,2}=1,06; p>0,05 | t_{2,3}=0,85; p>0,05 | t_{1,3}=1,86; p>0,05

Strength: flexing and extension arms support, lying on the floor; quantity times | 18,3±0,85 | 19,8±0,91 | 21,8±0,80 | t_{1,2}=1,20; p>0,05 | t_{2,3}=1,65; p>0,05 | t_{1,3}=3,00; p<0,01

Dexterity: shuttle run 4x9m, sec | 11,3±0,36 | 10,9±0,25 | 10,3±0,28 | t_{1,2}=0,91; p>0,05 | t_{2,3}=1,60; p>0,05 | t_{1,3}=2,19; p<0,05

Speed-power qualities: standing jump, cm | 143,6±2,26 | 147,7±2,19 | 152,3±1,77 | t_{1,2}=1,30; p>0,05 | t_{2,3}=1,63; p>0,05 | t_{1,3}=3,03; p<0,01

Training process that provides the development of motor qualities, had impact on some psychological qualities, above all, on forming most stable interest for exercises.

Table 2
Test results of young tourists using method «Motive researching of taking up sport» (in points) (n=15)

<table>
<thead>
<tr>
<th>Motive</th>
<th>Age</th>
<th>10 years</th>
<th>12 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>10 years</td>
<td>12 years</td>
<td></td>
</tr>
<tr>
<td>Perception</td>
<td>2,9</td>
<td>3,0</td>
<td></td>
</tr>
<tr>
<td>Material comfort</td>
<td>2,8</td>
<td>2,7</td>
<td></td>
</tr>
<tr>
<td>Development of character and mental qualities</td>
<td>3,1</td>
<td>3,2</td>
<td></td>
</tr>
<tr>
<td>Physical perfection</td>
<td>3,5</td>
<td>3,7</td>
<td></td>
</tr>
<tr>
<td>Improving of health</td>
<td>2,6</td>
<td>2,7</td>
<td></td>
</tr>
<tr>
<td>Aesthetic satisfaction</td>
<td>2,9</td>
<td>2,9</td>
<td></td>
</tr>
<tr>
<td>Getting useful for life skills</td>
<td>3,0</td>
<td>3,1</td>
<td></td>
</tr>
<tr>
<td>Need in praise</td>
<td>3,9</td>
<td>3,7</td>
<td></td>
</tr>
<tr>
<td>Increasing of prestige, desire of glory</td>
<td>3,2</td>
<td>3,3</td>
<td></td>
</tr>
<tr>
<td>Sense of collectivism</td>
<td>3,6</td>
<td>3,7</td>
<td></td>
</tr>
</tbody>
</table>

Indices of psychological state of organism were assessed at the beginning and at the end of initial period of training.

Tests results show that children of different ages have some differences in motives of taking up sports.

So, boys aged 10 as main reason name need in praise (3,9 points), collective communication during trainings (3,6 points) and physical perfection (3,5 points).
Under taking up sports tourism for 2 years sense of collectivism, perception, getting useful for life skills, formation of character and physical perfection start to increase.

**Discussion.** Received indices testify to a positive influence of the sports tourism classes on the boys physical fitness and psychological state, which gives them opportunity to adopt to labour activity and nonconflict day-to-day communication afterward.

**Conclusions**

1. Training process of young athletes, who took up sport tourism made it possible to increase physical qualities. Their level had authentically increased in period from 10 to 12 years in indices of endurance (1500 meters run), strength (flexing and extension arms support, lying on the floor), dexterity (shuttle run 4x9 m) and speed-power qualities (standing jump).

2. Training classes of sports tourism have positive influence on formation qualities that causes positive psychological state of 10-12 aged athletes.

**Literature**


DIFFERENT PHASES OF NORWEGIAN AND HUNGARIAN WOMEN JUNIOR HANDBALL MATCHES (A COMPARATIVE ANALYSIS)

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*Hungary*

**Keywords:** woman handball, phase, efficiency

**Introduction:** Handball is a sport dominated by tactics (*Rigler, 2000*). From the point of view of tactics, four phases of a handball match can be distinguished, such as: offence against unorganized defence, offence against organized defence, defence while running back, organized defence.

The motivation of choosing the topic was to get to know the specificities of each four phases of the Norwegian team and to make a comparison with the similar data of the Hungarian one, and to find the reason why Norway excelled itself at the European championships and finally won the European Championship with no loss.

**Hypotheses:** 1. The team of Norway is more efficient in all four phases. 2. The team of Norway spends more time on defence than the team of Hungary. 3. The biggest difference between the efficiency of the phases can be found in the organized defence. 4. The frequency of the offence against unorganized defence is higher with the team of Norway.

**Methods:** Twelve matches of the Norwegian and Hungarian woman junior handball teams (played at the European Championship in Hungary in 2009) were analyzed with video observation. The main observation viewpoints were as follows: occurrence and time of the phases and the efficiency of the periods. The statistical differences between the matches were then processed with contingency table.

**Results:** The efficiency in the different phases of the Norwegian and Hungarian teams was: 42%-34% (offence against unorganized defence), 41%-32% (offence against organized defence), 50%-35% (defence while running back), and 65%-49% (organized defence). The time spent on defence was 10574 seconds with the team of Norway, while the team of Hungary spent 8564 seconds on it. The biggest difference between the efficiency of the phases can be observed in the organized defence: 16% (65%-49%). The team of Norway led 168 attacks against unorganized defence, while Hungary had 120 ones.

**Summary:** The team of Norway had a better performance in all the four phases, but the difference between the efficiency is not significant (hypothesis 1 has to be rejected). In spite of the fact that the team of Norway spent more time on defence, it did not result in statistical difference (hypothesis 2 proved to be invalid). The biggest difference between the efficiency of the phases can be found in the organized defence, but this difference is not significant (hypothesis 3 proved to be invalid). The team of Norway had more chance to launch an attack against unorganized defence than the team of Hungary but it did not result in statistical difference (hypothesis 4 proved to be invalid).

To sum it up, it can be said that the team of Norway was better in all phases of
the match. They put the organized defence in the focus of their game. They spent most of their time and energy on it. It shows their concept of the play which is the base of the modern handball. The success of this phase can level up the other elements of the game and it can have an effect on the offence as well. It is such a future trend in handball that should be followed by all those teams who would like to reach great success in handball.
INCREASING THE EFFECTIVENESS OF THE TRAINING PROCESS OF SPORT BALLROOM DANCERS AT THE INITIAL STAGE

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**Introduction.** The initial stage plays a determining role in the years of preparing sport ballroom dancers on many factors. The role of this stage is not only the development of physical qualities, the knowledge and skills, but also the education needs and the motivation to study dance sports activity.

In this case, the role and importance of the following stages of sport preparation is rising and this requires further development of dance skills. By what means and methods used in the initial stage, depends the foundation of sport future.

Object: a training process sport ballroom dancers at the age of 6 - 8 years.
Subject: the pedagogical methods used in dealing with sporting ballroom dancers.

Working hypothesis: It is assumed that the inclusion of specific characteristics beginners of sport ballroom dancing will significantly improve effectiveness of the training process; therefore it may influence the structure of long-term athletic training.

Purpose: To determine the effects of psycho-pedagogical features to build the training process involved in the initial stage of sports specialization.

Objectives:
1. Identify the factors influencing the uptake of educational material on ballroom dancing.
2. Identify the factors influencing the level of training involved in sports at an early stage.
3. Suggest methodical recommendations for the construction of the training process involved in sport ballroom dancing at the stage of initial training.

**Methods.**
1. Analysis of scientific literature.
2. Teacher observation.
3. Comparative pedagogical experiment.

Organization of research: The research was over 7 months (November, 2010. - May 2011.) Based on the sport complex "Albatross" dance club "Rhythm". The research involved 2 groups of 10 people (experimental and control). Composition of groups: boys and girls at the age of 6 - 8 years.

Comparing the two groups was carried out according to the results of the control contest category N-3 (May 2011).

**The results.** All this research showed that the average results of control competition equal to 2.59 of the experimental group (a score of 3-point scale: 1 - min. value, 2 - grade point average, 3 - the highest score). A rate of the control group is 1.64. That suggests a more successful competitive the pilot group.

It is more reliable data, calculated by t-test, where \( t = 5; \) \( t_{0.05} = 2.101 ; \) \( t > t_{0.05} \).
The results of pedagogical experiment shows that application of the proposed methodical methods increases effectiveness of the training process involved in the initial stage.

**Discussion.** During teacher observation there were identified the determining factors that influence level of teaching and training students. Of course, such teaching methods as a method of oral presentation, a discussion of the material, showing, training have a positive effect on teaching and training process.

However, we should not, ignore this teaching method, as an independent work, which in most cases can be seen on practice. In our experiment, it is represented as: self-studying of material, working with a book (a specially designed booklet "Workbook for ballroom dancing"), watching videos. This booklet includes the following topics: the history of sport ballroom dances, the characteristics of the standard and latin dances, the names of each dance, the control questions, the creative tasks, the personal card of the athlete. The topic "The History of Ballroom Dancing" helps engaged fully determine the formation, development and role of the elected sport. Using the video makes learning more interesting. And the use of control questions helps to perpetuate the material. Submission of the theoretical material is clearly structured and demonstrative, which promotes fundamental knowledge of the dances. Creative tasks make the training process more diverse. You can plan further and individual work with the athlete because of using control achievement. Interest and motivation of young dancers themselves promote the progressive training process. This is a potential for further training and improvement in the dance sport.

**Conclusions**
1. Using a specially designed booklet "Workbook for ballroom dancing" allowed methodically organize training process sport ballroom dancers at an early stage.
2. This method of training as an independent work contributes to in-depth learning.
3. Complex use of teaching methods will build higher level of preparation of the dancers.

**Bibliography**
THE PSYCHOLOGICAL PREPARATION IN BOXING

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Boxing is a unique sport. A common perception is that boxers need to psyche themselves up into a frenzied state, fuelled by anger with the intention of causing injury.

However, for those who have worked in boxing, this perception could not be further from the truth. In a sport where there is only one winner, seeing an opponent struggling physiologically during a contest provides a huge source of motivation, and boxers look to exploit every weakness or frailty in their opponents (1).

Most of boxers recognize the importance of psychology to performance. The trainer Cus D’Amato said that ‘fights are won and lost in the head’ and this confirms testament to the importance of psychological factors for performance (2).

A boxer should be in control of his or her emotions and be able to get into the emotional state which he (she) believes helps performance.

Successful fighters demonstrate positive emotional profiles before competition (3,4).

A key question typically posed to boxers is whether a boxer intends to injure his or her opponent. The answer is that boxers (like all competitors) aim to win, and injuring the opponent may be a necessary part of that process (5). A boxer therefore has to be prepared to inflict injury on their opponent and show no mercy in doing so – a mindset that is subtly different to intending to injure.

When a boxer sees that their opponent is hurt, this is seen as an indicator of goal attainment. Since the aim is to win the contest, this may well involve inflicting further damage.

Boxers must capitalize on the weaknesses of their opponents and any sign of weakness is an indicator that victory is possible. Boxers learn to hide when they feel hurt or tired, outwardly presenting a profile of being calm and confident. The boxer places all duty of care of the welfare of his opponent in the referee.

Successful boxers must desensitize themselves to the effects of inflicting injury and accept personal risks each time they compete.

Sparring is very important for boxers because they hone their skills during sparring sessions. But it can result in fierce competition and sparring can be particularly intense in the early stages of learning.

Boxers should learn to save their best performances for competition.

It is important therefore that boxers also learn to regulate their emotions and thoughts during sparring.

Boxers should remember that there are no winners and losers from a sparring session.

Boxing involves managing discomfort and boxers need to able to desensitize themselves from this process. Emotional and attentional control are crucial to success. From the outset, boxers need to develop a mindset if they are to succeed. Sparring should be used as an opportunity to learn emotional and attentional control.
and boxers should use imagery as part of their training, for example when shadow-boxing.

References
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EVALUATION OF THE INTRODUCTION OF TIME PARAMETER TO MEN’S AND WOMEN’S INDIVIDUAL TRAMPOLINE AT YOUTH AND JUNIOR LEVEL

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Introduction
Trampolining as a discipline is performed in a routine including ten elements. In order to evaluate the routine, one has to analyse: routine difficulty, elements difficulty. In the recent years there have been significant changes connected with the increase of routine difficulty, increase of rotational exercises in varied axes and planes as well as performance risk. In 2011 FIT added to routine evaluation the criterion of time in which a particular element was performed. This requirement was introduced for all sport classes, including the young ones. Scientifically justified methods and means of recruiting sport children to teams as well as accelerated prediction of their future results is becoming an important category in modern system of preparing sportspeople from the beginners to the highly-qualified. That explains the relevance of the question: how to reveal kids’ and young people’s particular skills in the right time. In accordance with an organism growth indicator, physical and psychological skills diversify them and they become less related with each other. In this way, the individual skills show a child’s potential and eventual choice of motor activities.

The objective evaluation of young sportspeople’s individual characteristics is taken from extensive examination of children and young people. There is no one criterion of sporting prediction.

Even such an integral indicator as sport results cannot be a deciding factor in the process of recruitment, particularly as far as children and young people with incomplete process of growth are concerned. Morphological, functional, biomechanical, pedagogic, psychological indicators studied separately are not sufficient for conducting rational recruitment.

Sport practice shows that after the starting degree of the indicator it is impossible to reveal the ideal type of children which would combine morphological, functional, biomechanical, pedagogic, psychological qualities necessary for further specialization in a particular discipline.

In order to increase the degree of relevance of revealing children and young people’s potential skills it is important to specify not only the physical growth and preparation but also observation of changes which occur in these indicators in time. The first research on interchange elements of sport technique in acrobatics was carried out by Bołoban, Birjuk (1978, 1970). Next (Bołoban 1988, Sadowski, Bołoban, Wiśniowski, Mastalerz, Niźnikowski 2005, Sadowski, Bołoban, Niźnikowski, Mastalerz, Wiśniowski 2007) have confirmed the effectiveness of evaluation of sport technique and drawing up teaching algorithms. The authors (Czaplicki, Wiśniowski 1998, Czaplicki, Wiśniowski 2001, Czaplicki, Łojek,
Wiśniowski 2002) propose using time characteristics for technical analysis of trampoline jumps.

**Material**
The research material consisted of data concerning the finalists of men’s and women’s individual trampolining in Polish National Championships of Youth Acrobats (OOM) 2011.

**Methods**
The methods of diagnostical survey and experts’ assessment aims at analysing the legitimacy of introducing an evaluation of time of routine elements in teenage competitions.

The method of experts’ assessment aims at evaluating time structure and life structure in a routine of the finalists of men’s and women’s individual trampolining in OOM 2011.

**Techniques**
Comparison – analogy, analysis – synthesis of time structure and life structure of routines of the finalists of men’s and women’s trampolining in OOM 2011 made by polish and international panel of judges in trampolining.

We possessed the data on duration of performing particular exercises and routines as well as the data on age, weight and height of the finalists of men’s and women’s trampolining in OOM 2011.

**Research results**
Analysis of individual trampolining medalist OOM have to prove high level of technical preparation, individual style of performance exercises. The basis for obtaining a high assessment championship sports is indicator parameters such us time of flight, difficulty, number of degrees rotation somersault flight and their sum in routines.

1. Medalists OOM of individual trampolining obtained the following results of the analyzed parameters:
   - variable weight and routine of obligatory equal to 0,589131
   - variable weight and routine of free equal to 0,545404
   - variable growth and routine of obligatory equal to 0,502664
   - variable growth and routine of free equal to 0,410626

**Conclusions**
We analysed the relation between body weight and duration of a jump of obligatory and free routines. We also analysed the relation between body height and duration of a jump of obligatory and free routines in sportclasses III and II on OOM.

In both cases we found statistical gravity between duration of a jump and body weight as well as body height p<0,5000.

**References**
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THE ADVANTAGES OF USING THE DARTFISH TECHNOLOGY IN TRAINING CYCLING SPRINTERS

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State Educational Institution- Moscow High Specialized School of the Olympic Reserve №2

Introduction
A majority of Russian athletes learn on their own mistakes during this or that start.

Currently in the sprinter kinds of cycle racing where the situation during a round may change several times and it is required from an athlete to instantly be able to make a correct decision, the opportunity to receive information in a timely manner which allows to display a tactical flexibility during the rounds at competitions and have a significant practical training-methodological material for further improvement of the athletic mastery in the course of a training process. The use of special technologies, effects and techniques depicting and updating these or those events during an athlete’s work allow to quickly and efficiently correct an athlete’s actions as well as to arrange detailed theoretical and practical exercises during a training period.

Methods
There are a lot of method to acquire information about the athlete’s actions which allows to evaluate his functional and tactical and technical preparation in this or that way, the correctness of the execution of technical elements and techniques during the training and what is especially important the competitive activities.

One of such decisions is a software-analytical complex of video analysis ‘DartFish’ allowing to evaluate tactical and technical actions of an athlete, his speed and force values in the real time mode.

Dartfish was founded in 1999 as an InMotion Technology to develop commercial program technologies SimulCamTM and other digital image processing mechanism. In January of 2001 SimulCamTM was followed by StroMotion TM.

Today the Dartfish technologies are well known due to high quality TV broadcasts. The exclusive application of Dartfish became the first breakthrough in the methodology preparing athletes, in education, medicine and other areas of activities. The athletes using the Dartfish technology won 162 medals in various kinds of sport at the Olympics of 2010 in Vancouver which is almost 62% from the general number of the drawn sets of medals!

In order to reconstruct the competitive elements and detect key moments in the athlete’s actions a DartFish video recording is carried out. These materials are used to receive information about the status of speed-force characteristics of an athlete for the period of the recording, his tactical accuracy and flexibility.

The systematic use of the DartFish complex at the competitions of various levels and different age groups gives an opportunity to create a data bank not only of the athletes themselves but of all the competition participants (including basic rivals).

The possibility to review and analyze the performed element or technical
action by a coach and an athlete during or after the training increases the effectiveness of the training process itself and allows for the athlete to figure out the essence of this or that action more precisely.

The possibility to break the athletic actions into elementary constituent parts, detailed analysis of each of these constituents increases the effectiveness of the athlete’s training process many times over as well as the speed of his sportive growth.

The simplicity of the complex use in conjunction with the up-to-date telecommunications solutions allows to timely provide the coaching headquarters with the information about the speed and force values, tactical athletic actions. This allows more precision in introducing changes into technical elements, tactical schemes of an athlete at the following competition stages. Such a timely reaction to a changing situation increases a possibility to achieve the maximum result – the victory - many times over!

One of the directions of work in the framework of the DartFish complex use is the evaluation of speed and time parameters of printer cyclists at the distance of 200 meters straight off which is used as an evaluation criteria of their functional readiness and tactical variety in the match sprinter rounds.

There are 4 values that lay as a basis of the analysis:
- mean speed value for 100m or 220m
- speed value at the start
- speed value at each 10 meters of the distance
- gear which the athlete uses to cover the distance.

If the first value can be obtained from the official organizers and normally it is displayed on a monitor right in the course of the athlete’s performance, the other values are received through the course of review and analysis of the recorded video material directly in the software-hardware complex DartFish using a totality of standard DartFish functions such as, for instance:
- Tracing;
- Interpolation;
- Imposition (Comparison);
- Image Breakdown;
- Export-Import of Alternating Data.

Discussion of Results.

These are the results of implementation and use of the DartFish system in the training and competition process of the cycling sprinter athletes of the State Educational Institution - Moscow High Specialized School of the Olympic Reserve №2 for a year:

1. Development and working-through of the methodology that allows to timely provide coaches with the information on the technical characteristics and functional peculiarities of athletes in order to introduce corrections into technical elements and tactical schemes of the subsequent rounds with the purpose to maximize a successful performance;

2. Development of the informational data bank about the athletes’ performances both in Russia and abroad, development and regular update of the
training-methodological material for theoretical classes (it is especially urgent for juniors and girls due to a deficit of starts);

3. Systematic arrangement of theoretical classes for sportsmen.

4. The result of the joint work of the research-informational group (with the use of the SHC DartFish), coaches and sprinter athletes is a successful performance of Russian sprinters – representing Moscow High Specialized School at Russian and international competitions: Anastasia Voynova (overall world and European champion amongst juniors of 2011), Nikita Shurshin (silver prize keirin winner in the world junior championship of 2011), Denis Dmitriev (European champion in sprint of 2010, bronze medal holder of the European championship in sprint of 2011).

Conclusions
1. The video analysis system is characterized as universal, adaptive, multifunctional, it ensures a uniform technological cycle of the receipt of necessary information and is an effective tool to select optimal means of technical and tactical preparation of athletes. It is expedient to use it both while training beginners as well as qualified athletes.

2. DartFish allows the coaches and athletes of various level the capability to build the training process optimally and most efficiently.

Bibliography
INFLUENCE OF CHOSEN STYLE OF SWIMMING ON QUALITY OF ITS DEVELOPMENT AT THE BEGINNING LEVEL OF TRAINING OF 6-8 YEAR OLD CHILDREN

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Annotation. The purpose of the work is the definition of influence of chosen swimming style on its quality development at the beginning training level of 6-8 year old children. Various methods of scientific research, including mathematic– statistical have been used in the work: functions of addition, definition of average arithmetic and indicators of calculation of %. The data about a choice of structure for children`s feet work in groups for the beginners has been obtained on the basis of pedagogical experiment.

Research general characteristics
The work urgency is presented by a choice of a swimming style on the basis of genetically caused structure of feet movements teaching at the beginners level in water. The majority of swimming school programs provide training of two similar swimming styles: a crawl on breasts and a crawl on a back. It promotes increase efficiency of training process and encourages interest for swimming lessons. However, the modern program of work with children and teenagers in Sport Youth schools is constructed on complex studying of four sports styles of swimming. This approach urged to raise coordination base of pupils movements and allows to define the abilities of children inclined to swimming. The majority of the generated skills (walking, vertical position skill at walking, free breathing) prevent from formation of swimming skills. Taking into account specific features of locomotive presumes to lower the phenomenon of negative carrying over of impellent skills if they are as much as possible similar to swimming movements.

The purpose of the work is to define influence of chosen style of swimming on its development quality at the beginning training level of 6-8 year old children

Hypothesis: it was supposed that the account of specific features while choosing a style of swimming will allow to carry out training process more effectively.

The object of research – is the training process of swimming for children ages 6-8 years old.

The subject of research – is quality assessment of the chosen styles of swimming for children taught according to the complex and individual methodic.

Research tasks:
1) To determine the individual nature of feet movements of children 6-8 years at the beginning level of training.
2) To estimate the techniques of swimming for children of 6-8 years old according to complex and individual training methods
Pedagogical experiment. In September two groups of children ages 6 through 8 years have been divided in 2 groups: 8 in experimental and 8 in control. Children from control group were trained to swim according to the complex program – i.e. 4 styles simultaneously. The swimming style for the experimental groups is chosen according to structure of feet movements.

<table>
<thead>
<tr>
<th>№</th>
<th>indicators</th>
<th>Exercising</th>
<th>Score(points)</th>
</tr>
</thead>
</table>
| 1  | Body position in water.           | - High: shoulders and back are located above the water surface. Hip-bone and legs close to the surface.  
- Average: head above the surface, Hip-bone and legs close to the surface.  
- Low: the body is completely in water. Head above the surface. Hip-bone and legs in deep water. | 3             |
| 2  | Head position while inhaling.     | - Head turns to the side or chin forward.  
- The head is up while inhaling.  
- The head is entirely above water surface. | 3             |
| 3  | The nature of movements of arms and legs | Movements:  
- Smooth and easy with large amplitude.  
- Smooth, but with shorter amplitude.  
- Sharp, short enslaved movements. | 3             |
| 4  | Movements coordination of arms and legs. | - Coordinated movements of the arms and feet in a single cycle.  
- Movements of arms and legs adjusted partly.  
- Arms and legs work uncoordinated, separately. | 3             |
| 5  | Swimming movements and breathing coordination. | - Acts of breathing in every cycle.  
- Inhale-exhale is done in for 1-2 cycle.  
- Inhale-exhale is performed scarcely. | 3             |

Methodics: we have carried out a choice of a swimming style on the basis of
genetically caused structure of feet movements at beginning level in water environment. The carried out data analysis shows that the technical training level of an individual swimmers style from both groups was high enough after the application of the universal estimation table of swimming techniques by Malygin and Aleksandrov.

**Results of research:** the advantage difference of experimental group wasn't so essential as we assumed in the beginning of experiment. As a whole, pupils of experimental group have better mastered a swimming style, gathered 12,8 points in comparison with the control group – 11 points. The difference makes 1,8 points or 11,6 %. It isn't surprising, because all pupils of experimental group have mastered just one swimming style, unlike representatives of control group who were taught all 4 swimming styles at the same time. However, the advantage difference of experimental group isn't so essential, as we have assumed in the beginning of the experiment.

**Conclusion**
1. We consider that children who are taught by complex swimming styles techniques show low estimations in breast stroke and crawl on a breast if their individual predisposition isn't considered.
2. Training of one swimming style is most likely to be used in Health Camps, where during the limited amount of time it is necessary to teach at least one style with high quality.

**References**
THE PSYCHOLOGICAL FEATURES OF DEVELOPING ENDURENCE IN SHORT-TRACK

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Introduction
This topic is relevant for Short-Track because Short-Track is a semi-contact kind of sport where competitors need to make an overtake so that they may go on to the next round.

A Short-Track athlete has to have a high level of motivation and volition. This can help to increase the level of athletic readiness of these athletes. Failing of motivation for developing endurance among early teenagers is caused by a decrease in interest for physical self-improvement. There are public and personal motivators in sport.

The public motivation is the foundation of overall motivation in sport.
Public sport motivation is pre-conditioned by the economic relations in the society.

The set of personal incentive factors is very diverse:
- a desire to improve one’s health;
- a desire to develop well physically and to have a beautiful constitution;
- a desire to achieve a high result in sport.

An athlete needs to be trained to have a positive attitude to the work which causes fatigue to the unpleasant and painful sensations, which occur as a result of fatigue.

An athlete should regard these signs of fatigue as signals of achievement of the necessary training effect. The exercises for the developing of endurance are performed for an extended period of time and they are connected with multiple repetitions of identical actions of cyclic character; as a rule.

Owing to it the feeling of weariness can come from the monotony of the work. Combination of these features of the endurance training can promote occurrence of a specific new phenomenon which is the “factor of search for comfort”.

Motivational pair “exhaustion for a result” is replaced by another pair – “comfort for a result”.

This replacement is absolutely unacceptable in an endurance sport.

Endurance is substantially the force and the stability of the person’s motivation.

The main pre-condition of developing such quality as endurance is a clear understanding of the necessity to perform a physical task of certain intensity and repetition rate and a careful selection of the means and methods to realize this physical task in the training process.

To overcome fatigue, to decrease the negative influence of the feeling of fatigue on a working capacity; to counteract the monotony of the workload, it is necessary to form the ability, to direct consciousness, to concentrate attention.

It is necessary to bear in mind that a categorical mindset, attention switching,
concrete definition of problems and self-orders all these help to improve the endurance but only when the sportsmen have sufficiently developed such volitional qualities as perseverance and tenacity.

During our research we have conducted psychological tests among short-track athletes (girls) of 10-11 years old with the purpose of defining the level of volition and motivation.

**The research organization**

My research took place at the “Ismailovo complex”. We invited 7 (girls) students into an auditorium. I read out questions from psychological tests to them and they had to write down the answers. There were two tests with 20 questions each.

**The research results and conclusions**

The analysis of the received results has led to the following conclusion: short-track athletes (girls) of 10 – 11 years old aren’t motivated enough to perform the exercises included into the training process.

This means this problem exists in Short-Track and demands further research of psychological methods of influence and self-influence on the level of motivation of short-track athletes of different ages. As a post-graduate student I plan to conduct this research.

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WHICH QUANTIFIABLE PERFORMANCE PARAMETER(S) DETERMINED THE MEDALS WINNERS AT THE WORLD CHAMPIONSHIP 2011 IN RHYTHMIC GYMNASTICS – GROUP COMPETITION?

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Introduction
Rhythmic Gymnastics (RG) belongs to the group of technical-compositional sports. According to Schnabel & Tieß [10] it is a discipline with acyclic coordinative motion structures, which combine body and apparatus techniques. These structures have to be in high harmony with the accompaniment music. The purpose is not to hear a music piece nor to watch a composition, rather to read the music through the movements [1]. Compositions are characterised by the dualism of content and form. Content is represented by music, composition design, and choice/combination of body and apparatus elements, while expression, stability, dynamics and – only for group compositions – synchronicity determine the form [9].

Group competitions include numerous, difficult movement structures (Balances, Flexibilities and Waves, Jumps and Leaps, Pivots, Pre-Acrobatics) combined with apparatus (rope, hoop, ball, clubs and ribbon) and performed by five gymnasts, according to the musical accompaniment [11][8][1].

In the master class groups must present one composition with one type of apparatus (2011-2012 five balls) and one with two different apparatus (2011-2012 three ribbons and two hoops). Due to the high pace of movement and to the high number of actions the evaluation of the performance is very hard work [6]. Since 1965 individual and group competitions in RG have been analysed by many authors [3]. All of them could draw conclusions about quantitative performance indicators [2][10][6][7], while none could objectify the qualitative parameters [5][3][4][6]. Liviotti [9] stated that in years 2009 / 2010 among the quantifiable performance indicators apparatus techniques played the most important role in both disciplines, while in the past the performance was mostly determined by body techniques [6].

Aim and Methods
The aim of the present study is to compare the performance of the three medallists in the discipline with five balls (Russia, Italy and Bulgaria) at the World Championship 2011 (Montpellier, France). The comparison should show if the medal winners statistically differ from each other regarding to the indicators mentioned above or, on the contrary, if their performance is similar. In order to carry out a choreography analysis specific software for notational analysis in sport is necessary. In this context the software SIMI Scout (SIMI GmbH, Unterschleißheim, Germany) was utilized. For this purpose eleven parameters were taken into account and statistically processed by means of the Statistical Package for the Social Sciences PASW 18. (Table 1).
<table>
<thead>
<tr>
<th>Category</th>
<th>RUS</th>
<th>ITA</th>
<th>BUL</th>
<th>H-Test (p = .05)</th>
<th>U-Test (p = .05)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Other Movements *</td>
<td>6.0</td>
<td>0.0</td>
<td>9.2</td>
<td>0.5</td>
<td>13.4</td>
</tr>
<tr>
<td>Jumps</td>
<td>3.0</td>
<td>0.0</td>
<td>5.4</td>
<td>1.1</td>
<td>5.0</td>
</tr>
<tr>
<td>App. controlled by Body**</td>
<td>22.2</td>
<td>0.4</td>
<td>18.4</td>
<td>4.8</td>
<td>17.0</td>
</tr>
<tr>
<td>App. abandons Body***</td>
<td>20.6</td>
<td>3.4</td>
<td>26.4</td>
<td>4.6</td>
<td>23.2</td>
</tr>
<tr>
<td>App. Catches</td>
<td>18.6</td>
<td>1.5</td>
<td>27.0</td>
<td>1.2</td>
<td>23.2</td>
</tr>
<tr>
<td>App. Exchanges</td>
<td>15.6</td>
<td>3.2</td>
<td>21.4</td>
<td>3.4</td>
<td>13.6</td>
</tr>
<tr>
<td>Exchanges by throw</td>
<td>11.0</td>
<td>1.79</td>
<td>17.0</td>
<td>2.9</td>
<td>11.0</td>
</tr>
<tr>
<td>Exchanges by other techniques</td>
<td>4.6</td>
<td>2.2</td>
<td>4.4</td>
<td>1.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Group Distance (m)</td>
<td>81.07</td>
<td>2.59</td>
<td>96.31</td>
<td>8.35</td>
<td>79.76</td>
</tr>
<tr>
<td>Group Synchronicity (%)</td>
<td>100.00</td>
<td>0.00</td>
<td>96.47</td>
<td>5.26</td>
<td>93.45</td>
</tr>
<tr>
<td>App. Synchronicity (%)</td>
<td>99.23</td>
<td>0.94</td>
<td>94.30</td>
<td>2.78</td>
<td>95.09</td>
</tr>
</tbody>
</table>

** ** Turns, Elements of flexibility / Waves, Elements of Balance
** ** Roll over the Body, Unstable Balance of the Apparatus, Apparatus Handling, Bounces
*** ** Large Throw, Small Throw + Catch, Roll on the Floor, Bounces
Results

Differences among teams are related to nine out eleven considered parameters. In particular these differences regarded body techniques, number of exchanges as well as catches, apparatus techniques where the apparatus is permanently controlled by the body, distances and level of synchronicity showed performing both body and apparatus techniques (Table 1).

By means of the Mann-Whitney-Test was possible to exactly define between which groups these differences appear. Fewer differences are shown by the comparison between Italy and Bulgaria, so that it is possible to conclude that the differences found out through the first significance test mostly appertain to the comparison between the gold medallist and the other two teams (Table 1).

Conclusions

The analysis points out that the most successful choreography does not include the highest number of quantitative parameters. For this reason it is possible to suppose that the winner is who takes less risks and presents fewer elements, compared with those who take more risks therefore more opportunity to make mistakes. Moreover, synchronicity seems to be a determining parameter for the victory. These preliminary observations have also to find confirmation in the future by the comparison between the three medalists and the other five finalists.

Actually the performance in RG is influenced by the quantity as well as by the quality. Despite of several attempts to objectify the evaluation of performances in this sport discipline it is not possible to estimate it in all its aspects down to the present days. That is due to the fact that too much is left to the individual/subjective opinion of the observer. Thus, a future goal will be the objectification of the performance parameters defined above as qualitative, in order to provide more exhaustive choreography analyses. For this reason the collaboration of national and international clubs and federations is necessary. They can take advantage from this kind of analyses in terms of: supporting the coaching process; creating performance profiles for individual gymnasts and groups; ranking performances; creating data bases in order to identify the most influencing performance indicators and tendencies in the development of RG.

References


TRAINING AND EXTRA-TRAINING MEANS AS WORKING CAPACITY STIMULATION FACTORS DURING THE PROCESS OF PRESTART PREPARATION OF QUALIFIED ATHLETES IN FENCING

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The continuous growth contention on sports arenas and increasing necessity of comprehensive and fully use of athletes’ resources, causes the importance of research aimed at finding a scientific basis of recovery and stimulation methods of special working capacity during the competitive activity.

The modern sports theory accentuates some points which permit to settle the problems owing to complex application of training and extra-training means of the common orientation [6].

To prepare an organism for realization of its potential under the influence of special means of athletes’ preparation, special motion routines are used in sports practice, like warm-up and prestart exercises. Besides, special “setup” training classes are used [5].

A considerable number of researches aimed at finding out how the intensity of specially organized prestart activities affects the working capacity [1, 2, 3].

Duration and intensity of prestart activities depends on kind of sport, functional state of athletes, preparation stage, another different factors. Typically, the content of prestart work of qualified athletes is quite stereotyped. It is based on the application of proven workout regimes and more relies on the athlete’s experience and his/her personality. This raises the problem of maintaining required stimulation functions to form the mobilization readiness of athletes.

It becomes evident in competitive activity, when warm-up exercises of the same type reduce physiological reactivity, kinetics of the main reactions and the overall organism ability to respond adequately to repetitive loads [4]. This significantly increases the role of additional training resources and stimulating extra-training influences. Application of extra-training means seems to be promising for creation of adequate reaction to whole complex of prestart activities because of their universality, novelty and specifics. The implementation of this approach will increase the efficiency of prestart state management of qualified athletes.

Aim of the research – to form the concept of training and extra-training means application during the process of prestart preparation of qualified athletes in fencing.

Methods of the research – the analysis and generalization of special scientific and methodological literature; analysis of information on the Internet; analysis of competitive activity.

The theory of sports represents a period of training where additional effects may be used to stimulate functional abilities of athletes and consider the upcoming competitive activities (competitive microcycles). It was shown that application of such effects in this period increases the special working capacity of qualified athletes and, therefore, creates preconditions for achieving high sport performance [6].
The investigation found out that there is a deficiency of scientific-based approaches, aimed at stimulation of special working capacity of qualified athletes in fencing during the process of immediate prestart preparation.

In order to improve the efficiency of special working capacity of qualified athletes in fencing, a special set of prestart influences which includes short-term high-intensity exercise, as well as exercises with a partner was developed.

The implementation of the prestart effect of preparedness type calls forth a rapid warming up of an athlete’s organism, activates proprioception and raises sportsmen’s capability to carry out a number of complex coordination activities much more effectively.

The prestart program includes training and extra-training influences which form delayed adaptation effects, as well as, complexes that provide realization of special working capacity potential during the competitive activity.

The content of training and extra-training influences is interrelated and combined with the traditional system of prestart preparation in fencing.

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FEATURES OF THE TESTING SYSTEM IN PREPARATION OF BASKETBALL PLAYERS

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Significance and efficiency of control of athlete’s preparedness and its results upon the quality of training process management is well known. The most widespread way of pedagogical control is testing that is studied in the works of (V.I.Zatciorskii, M.A.Godik, Skorodumova A.P., Kostikova L.V., Fok and Bube and others.)

In basketball, there are a lot of tests to estimate the physical and technical preparedness of athletes. However, in the basketball practice there has been a tendency to underestimate the testing and analysis of its results, which reduces the objectivity of estimation for training effects and information about the state of basketball players, and it doesn’t allow to correct training process differentially.

Understanding the importance of pedagogical testing of basketball players with due regard for their age and skill level, we undertook the present research, which goal to systematization of tests for physical and technical preparedness of basketball players and the analysis of application of their results for basketball young players.

**Tasks:**
1. Identify a suite of tests used in the theory and practice of basketball over the years.
2. Explore by means of tests the level of preparedness of basketball players of all ages and skills.

**Research methods:**
1. Studying literary sources and materials from the Internet.
2. Pedagogical testing of physical and technical preparedness of basketball players.

**Organization of the research**
The research was conducted in the period of 2008-2011. We conducted systematization of tests for physical and technical preparedness that are used in different years in Russia in the practice of training basketball players of all ages and skills. We have also analyzed the tests used in the United States and basketball clubs in Serbia. After that, we selected the most modern and proven in theory and practice tests, and tested the young basketball players.

**The results**
We have identified more than 70 tests on the physical and technical preparedness of basketball players. Tables 1 and 2 demonstrate a systematization of tests for physical and technical preparedness of basketball players of all ages and skills, mentioned in official documents, such as the Programme for Youth Academy and Target complex training programs for national teams of Russia.
Table 1

The tests determine the level of physical fitness of basketball players in Russia

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group initial training CYSS</th>
<th>Trainer and sports group to improve CYSS</th>
<th>Club and national teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sprint 20 m. (s)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2. Speed defensive movements. (s)</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3. Serial jumping (number of time)</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4. Height of the jump. (by Abalakov) (sm)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5. Max. standing jump up and running jump up (sm)</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>6. Long standing jump (sm)</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>7. Speed endurance (2 series of 5 runs areas at intervals of 1.5 min) (s)</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>8 Speed endurance (running for 40 seconds) (m)</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>9. Running 300 m (s)</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10. Running 600 m (s)</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>11. Cooper test (m)</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>12. Speed and agility defensive movements (s)</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

In Table 2, there are tests for technical preparedness, while they are mainly aimed at identifying the current level of basketball players’ technique of distance and free throws, dribbling at speed, speed of pass, and for the very young basketball players there is a variety of motion games.
The tests determine the level of technical preparedness of basketball players in Russia

<table>
<thead>
<tr>
<th>Tests</th>
<th>Group initial training CYSS</th>
<th>Trainer and sports group to improve CYSS</th>
<th>Club and national teams</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Distance throws (40 shots)</td>
<td>−</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>- Distance throws (10 to 20 shots)</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>2. Free throws (3 sets of 6 shots)</td>
<td>−</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>- Free throws (different shots)</td>
<td>−</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>3. «Speed dribbling» (s)</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>4. «High-speed technique» (tracings with a throw) (s)</td>
<td>−</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>5. «Passing the ball with attack» (s)</td>
<td>+</td>
<td>+</td>
<td>−</td>
</tr>
<tr>
<td>6. Motion games.</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
</tbody>
</table>

As you can see, a list of tests used by the Russian basketball players are not extensive, and therefore we attempted to reveal tests that are the most widely used at present by foreign experts in basketball.

**The tests used in different countries**

1. Dynamic balance.
   
The player starts on a signal the acceleration and there are abrupt changes of direction in the trapezium of 4 points. The passage time is recorded.

2. «Kamikaze»
   
   There is a kind of shuttle run, but in each of the line player must touch the line by his shoulder.
   
   This is done to recreate the more extreme playing conditions, collisions, falls.

3. Throws the ball for 30 seconds after the stroke counters.
   
   The player starts with stance installed on the If you have not scored, the ball should be kicked. Take into account trapeze, after the kicking the ball, dudge the other stance and attack again and so for 30 seconds. The number of hits in 30 seconds.

4. Movement in the defensive stance for 30 seconds.
The player performs the movement in the defensive stance going into the center of the circle and out of the circle. It’s an estimation of number of times in 30 seconds.

5. Movement in the defensive stance by 6 points.
   Movements by 6 points with defensive stance. Take into account the time (s).
   The player starts on a signal
   The dribbling, making dodge the ball racks with cross over and sharp changes in direction.
   Take into account the time (s).
7. Dribbling test.
   The player who performs the acceleration with leading around the uprights.
   Take into account the time (s).
8. Static balance.
   Standing on one leg with closed eyes and one foot on his knee, barefoot, hands on hips.
   You can not move, only have 3 attempts. Takes into account the time that an athlete can stand.
9. YO-YO test.
   The determination of endurance running in 20-meter intervals with a given acoustic signal intensity until failure.

Presented tests correspond to the specific character of basketball and focused on the definition of coordination abilities, speed defensive movements and ball control in dribbling, throwing accuracy and players’ ability for work (efficiency).

Also, we have studied tests and the latest testing data of physical preparedness NBA players on position.

These sets of tests are applied to the present for determination the physical preparedness of players, in the central training process of players from selected NBA teams in the NBA Draft.

To study the preparedness of players (men), there are the following tests:
   1. Sprint on three-quarters of areas (75.9 ft - 23.1 m)
   2. Agility of movement (s)
   3. The maximum standing jump up (sm)
   4. The maximum running jump up (sm)
   5. Bench press (as determined by the number of times).

To warm up NBA players work with weights 61 kg and with a weight of 84 kg in bench press till failure. Thus, our analysis used in modern basketball system testing, indicating that testing is the most important method of obtaining objective information.

But, unfortunately, at present, even these tests are fairly rare in children and youth and club teams in Russia, which leads to an underestimation of the players’ preparedness and it does not allow timely to adjust the training process.

But now, working as a coach for team from Junior basketball club "Runa", from a variety of tests, we were selected, in our opinion, the most informative tests
for basketball, and we conducted the testing twice for the physical and technical preparedness of young men born in 1996 (14-15 years).

The first tests were carried out in the interval between games of competition period in the season 2010-2011. The second test was conducted after the base stage of the preliminary period 2011-2012 season.

Analysis of the results allowed us to trace the dynamics of the level of physical and technical preparedness of young players, in general, it was positive, as shown in picture 1 (A, B, C) and pic2 (A and B)

Pic. 1. (A), (B) and (C) The dynamics of the test results of physical preparedness of young basketball players

As you can see, there is an improvement of characteristics in the test "shuttle run", "dynamic balance" and «Speed defensive movements », standing jump and
running jump. In the test of serial jumping the increase of characteristics is not substantial.

Analysis of test results of technical preparedness (Picture 2 (A and B) showed the greatest increase in the tests, "High speed technique" and "passing the ball to attack." And on the accuracy of ball throwing and ball control there was the largest increase in "Distance" and "free throws".

Pic. 2. (A), (B) The dynamics of the test results of technical preparedness of young basketball players

Thus, we have objective measures of improving the level of basketball players for all tests, what is indicating about the optimal building of training process. Also, our data revealed the most strengths and weaknesses of each player's team, and that let us to estimate their preparedness in complex testing.

Thus, spent by us systematization of tests for basketball players of different age and skills, allows purposefully and to apply and reveal selectively dynamics of preparedness at different stages of preparation.
FEATURES OF CHESS AS A GAME

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Introduction. Chess game - it is a tense struggle of individuals, two individuals, two intelligences. "The chessboard is struggling men, and not the wooden figure," - said second World Chess Champion Em.Lasker. If we look at chess as any other profession, they also impose their own specific requirements for its implementation. And despite the specificity requirements of chess at the highest level of play all kinds of people in nature, by the cast of mind, level of education, interests, abilities.

The results. The Soviet psychologist Teplov emphasized that the degree of success of a diverse mix of activities is determined by abilities and the activity is carried out with excellent quality ...". There is nothing impracticable and scholastic idea that there is only one way to successful completion of all activities. These methods are infinitely varied as the diverse human faculties. The system of techniques, methods of action, which is characteristic of the person and is suitable for a successful outcome, determines an individual style. Knowledge of the individual to individual is a prerequisite that must be taken into account for effective education and training.

Discussion. Chess holds its rightful place in society, they act as an instrument of culture, and as a powerful means of educating the finest qualities of man, and as a means of aesthetic, intellectual, artistic and strong-willed qualities in a man. Pilot-Cosmonaut Vladimir Sevastyanov said: "The game of chess - it's not just a sport, recreation and entertainment. Occupation of developing logical and creative thinking, trained to analyze and solve problems, and all useful future specialist in any field ...". A number of scientific research (S. Hall, Koloytsa, A. de Groot) revealed great importance in the game of life and human development. The game - this is the true life of a child, the first phase of its activities, preparatory to further the vital work. The biological significance of the game does not lose its force and in relation to the life of adults. What game has deep roots in the life of human life, evidenced by the universal prevalence in the game go a different form, its vitality with all the changes in the structure and development of consciousness, its flexibility in adapting to the interests and level of development, it is independent of external conditions of life. Obviously, there is in human nature needs that are satisfied only in the game. Chess game perfectly confirms this, naschity-tries many centuries of its existence, costing the world and attracted thousands of people in a world of thought. Along with the games is really empty, giving nothing but thoughtless oblivion, the game of chess, although it has no direct practical value, but the refreshing strength of personality, it enriches the spiritual life. Profoundly true definition of a chess match, the situation that each person has a need for competition - whether in sports, in the maps in the game for a board, we want to test their strength, to try to win - as if in compensation for the fact that in our lives...
today, we must abide by the measured step, down by machinery. Adversarial point represents only one of two main aspects of this phenomenon. The other side - the moment of separation, isolation, immersion in a world of relationships, refills content control, but not everyday, but purely intellectual. Here personality is free, it is not a pawn, and she manages the pawns and kings. The game is not only facilitates the normal stress personality, but also compensates for the usual one-sidedness of psychophysical phenomena, that the narrowness of the ugly personality, which is still the inevitable condition of our civilization, and specialization. Among the ways in which find their way out still persisting, unmet needs, one of the important and is a game.

Like any world chess world has its own laws and requirements, otherwise there would be no life, there would be no peace which puts the player problem. But this - the requirements freely accepted, freely performed, due to his own desire to enter into this world and to obey its laws.

I. Clerks, N. Petrovsky, P. A. Rudick (1926) argued that: "By its essential attributes is, above all, effectiveness. The game is always a force, a dramatic episode. Further, it is actual reproduction of life ... At the same time, the game is free detection of the individual and his forces and interests. Arousing and developing the vital functions, the game adds value to the individual as an active participant in real life."

In the game of chess are found with utmost ease and clarity of these common and essential features of the game, which in union with the chess reporting features attractive force. What are these features?

Of all, perhaps, chess games differ a remarkable ability - they can prove themselves each master and lover. Anyone can give chess part of his soul, his own personality and ... person becomes aware of itself as a creative person, asserts itself. Whatever you say, self-affirmation is a powerfully content of our lives. In this high socio-ethical purpose of chess.

Competition in itself - is, ultimately, the meaning of the game of chess. I think that competition is with yourself in life more important than your partner. It was a match with an impulse of all the emotional life.

**Conclusion.** But chess give more. Like any other true creativity, they give people hope, reveal to him a sensible goal. Property of chess lead to the goal, the result is enchanting people. That's why people are given to the power of chess, although I noticed Em.Lasker "they are vaguely aware of it, is clearly aware of." Little to solve the problem, it should be resolved with the inexorability of logic. This justification, fatality in the game of chess attracts and seduces millions of people. In chess, as Stefan Zweig put it, people are looking for the start and goal.

**Conclusions.** Chess - a happy art. It lives not only in the memory of witnesses. It is best stored in the master batches and does not disappear when the master leaves the scene. It is always there: it can not be lost and is accessible to everyone, even if the master is lost to art. It is awarded to anyone who asks him questions. His strength is in interpretation. This inherent chess, music, or painting phenomenon enables repeated playback beauty and aesthetic pleasure to deliver ...".

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THE INVESTIGATION OF THE INFLUENCE OF SPECIAL ENDURANCE EXPONENTS ON THE RESULT IN FREE SKATING

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The Problem.

Jump elements in the 2\textsuperscript{nd} part of figure skaters` free programmes are performed in the condition of excessive fatigue. That is why according to the new ISU Judging System their base values are multiplied by the index 1.1 compared with jumps performed in the 1\textsuperscript{st} part of a free programme.

So we have chosen such topic for our research because we consider that performing jumps in the 2\textsuperscript{nd} part of free programmes is a complementary chance for athletes to receive higher scores for their free skating and to improve their final result. That means that exponents of special endurance should be on the highest level to reach the best score, and new ways of improving the exponents of special endurance should be found for sportsmen individually.

The Object of the Research: free programmes, performed by figure skaters of high qualification who takes in The European Championships, in The World Championships and in The Olympic Games.

The Subject of the Research: the 2\textsuperscript{nd} part of free skating.

The Aim of the Research: the investigation of the reliability of jumps performance and the percent of jumps realization in the 2\textsuperscript{nd} part of free skating in the capacity of the main exponents of special endurance.

The Tasks of the Research:

1. To make the statistic analysis of the reliability of jumps performance and the percent of jumps realization in the second part of free programmes for men and women of high sports qualification.
2. To learn the extent of influence of the reliability of jumps performance and the percent of jumps realization in the second part of free programmes on the result in free skating.
3. To work out a new way and to systematize current methods of training special endurance which would help to improve the exponents of this physical qualityTo devise a pedagogical experiment which would reflect the productivity of the method of training special endurance worked out during the investigation.

The Hypothesis of the Research:

A) The complex coordination of the second part of figure skaters` free programmes directly depends on the sports qualification.
B) The exponents of special endurance directly influence the result in free skating.
C) The method of training special endurance worked out during this investigation is going to improve the exponents of this physical quality.
The Methods of the Research:

1. Analysis of different literature including ISU judges` detailed protocols of different ISU competitions.
2. Video materials of different ISU competitions.
3. The method of mathematical statistics.
4. Pedagogical experiment.

The Conclusion.

When the new ISU Judging System appeared, it gave an opportunity to do more and more new researches in figure skating, because a lot things has changed since that: first of all, composition of programmes, and according to that methods of training. Nowadays sportsmen and their coaches have to find some new ways of increasing the technical score.

The investigation showed that performance of jump elements in the second part of free skating may not be the main factor which influences the final result but this is a complementary chance for athletes to receive higher scores in their free skating and to improve their sports results. That`s why the exponents of special endurance as well as common physical and psychological sportmen`s condition have to be on a very high level to show the highest results.
INFLUENCE OF ATTENTION CONCENTRATION ON SUCCESS OF THE QUALIFIED CHESS PLAYERS COMPETITIVE ACTIVITY

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Chess belong to intellectual kind of sports. That’s why competing and training process in chess fundamentally differs from other sports.

And at the same time chess belong to the sphere of art and science because of its beauty and logicality.

Psychological grounding in chess plays a very important part, like physical training in box or football. It’s hard to imagine highly qualified chess player without strong mind and psychology that can sustain long hours of intellectual fight.

The main weapon of a chess player is his thinking, which can be effective only in conditions of full concentration during the game. Other important qualities of good chess player are memory, ability to calculate variations and appreciate position rightly.

However, it’s not so easy to be concentrated during several hours of classical chess game and even during 10-15 minutes of blitz game. Players get tired, start worse control there calculations and that brings them to mistakes.

Attention in chess has been already searched by the Dutch scientists (Adrian de Groot, Fernand Gobet) and Soviet scientists (Krogius, Malkin, Zlotnik and others) in the previous century, but the results of this research are already out of date.

The object of our research is concentration of attention as a quality which is necessary for successful sports improvement in chess.

The purposes are

• researching of ability to concentrate attention among the players of different age and qualification
• training of attention using the method of psychological coaching
• working out practical recommendations for chess players for better concentration of attention during the training and competitive process.

The methods we used in our work are:

• The analysis of special chess and psychological literature
• Methods of psychological diagnostics
• Methods of psychological training
• Methods of mathematical statistics

For psychological diagnostics we used 3 methodics:

1. Burdon’s Proof test (2 variants with letters)
2. Pieron-Ruser’s test
3. Simkin’s Effective Chess Memory (ECM) test

For the training we used exercises for concentration of attention (fingers, breathing and second hand (as in clock)

The test was carried out with 2 groups of chess players.

The first group was high qualified players 18-26 years of age, included 20 persons of whom 9 - gm, 7 – im, 2 – wim, 1 – wgm, 1 – m). They where tasted by
first 2 methodic. The results where analyzed in connection with the rating of players.

You can see strong back connection between rating of players and effectiveness shown by the results of the first test. It looks very strange, but we think the reason is in low motivation for the high qualified chess players and also in fatigue as far as most of them where tested after 3-4 hours of the hard chess game.

The second group of the tested players where children of 9-17 years of age, included 22 persons, cm and first category). They were also tasted by first 2 tests and the results where compared with level and age.

You can see strong connection between exactness of attention and the age of players. And this looks absolutely logical, because the ability to concentrate attention is changing during the ages of childhood.

In the last part we organized ten-day training for the second group, using the exercises and ECM test. We compared indices of time and mistakes in ECM test before and after the training of attention concentration. Time indices weren’t changed a lot. But the average index of mistakes changed for better, in standard on 28.5%. You can see a progress; because in average index the athletes showed better results in the ECM test after the exercises then before them. We developed practical recommendations; build on the results of psychological diagnosing and training.
MOVEMENT ACTIVITIES AND THEIR INFLUENCE ON HEALTH DEVELOPMENT, HEALTHY ACTIVE LIFESTYLE FOR CHILDREN AND YOUNG PEOPLE, ADULTS, ELDERLY, DISABLED AND OTHER GROUPS

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The Motor Literacy by teaching.: a proposal for valid educational and teaching bodily and psychological growth of the individual.

Abstract
The concept of learning "model" in education-motor is similar to the process of Modeling in NLP (Neuro Linguistic Programming) which promotes the ability to influence behavior patterns through neurological processes resulting from a use of language that these mechanisms are only transferred in the field of motor resulting in forms of learning that we find in design situations related to our field of research which precisely Literacy Motor. The objectives of proper physical activity should stimulate reflection in relation to the techniques of sequential design and monitoring in the education and training of the individual mobility from a young age already. The contents and functions of these proposals can not be separated from issues related to education motor according to age and the context of reference, media and materials are available and finally the impact factor generated by the direct experience of the subjects involved.

The pilot project "Literacy motor" in the Primary School - Directions to the organization of motor activity in primary school, promoted and wanted by the Minister of Education Mr Gelmini, started earlier this year and has scolastico2009-2010 CONI seen as involving the organizer responsible for this project, the Presidency of the Council of Ministers and the contribution of the Italian Paralympic Committee.

Everything converges in a single priority: the safety and prevention, healthy lifestyle, health and wellness. In this way they have been achieved milestones in the development of skills at the end of primary school.

The details and the positivity of the data resulting from surveys made clear continuation of experience also allowed the start of this school year 2010-2011 with a possible implementation involving time in new school buildings.

The movement is a "basic need", as in Maslow's Motivation and personality, and you then need to educate the primary motivations which springs from the game as play and recreation and crucial stage of psychomotor development which is associated with a kind of competitive pressure as a stimulus to compete with itself and become a master of interior and exterior spaces.

These motivations are secondary reasons, not least, psychobiological factors that aim to restore balance and neurodynamic related to the processes of growth and socio-cultural factors, such as sense of belonging and satisfaction as a process of
cognitive stimulation and stimulation amygdala seat of our emotions.

Motivation encourages potential and quality of “self-efficacy” which is essential because it leads to greater belief in their own capacity and to strengthen that belief as an end and value added.

The dynamics that are triggered by the claim itself and the social context and also know their limits but also leads to greater autonomy and emerge stronger and insecure.

When engaging learning opportunities in education and motor must be created learning opportunities for "modeling" usually consist of various phases such as attention and observation of behavior to be learned leading to the selection of information, retention and representation of patterns of action in response to changing circumstances, the production and translation into action, monitoring results against the model, and finally on the ground that is made of direct incentives, incentives and vicars autoincentivi and must belong to all, children and young people, adults, elderly, disabled and other groups.

The methodological proposal put in these terms facilitates learning by using a system of mediators: to work by creating a complex learning environment that support cooperation between people who grow up together.

Combines the needs of children and those of adults, showing off both and allowing a shift from the grounds all'automotivazione.

In conclusion allows a shift from animation to an organization that provides independent testing for children and the establishment of a good connective structure.

The other key element is the social competence consists in the conquest of autonomy, the ability to relate to others. Every child must learn to form a positive attitude toward himself, then relazionerà positively with others. Self-esteem implies a degree of stability and emotional serenity and develops creativity. It is based on the recognition that every individual is unique, with special skills and sentiments that differentiate it from others, but under general similarities.

If these characteristics will be positively recognized by the significant adults and judged worthy of respect, every child will develop self-confidence. You will then make the most of everything that can go it alone, sending a positive assessment on the engagement, their attempts, although need of suggestions and corrections.

To obtain a classroom climate that enhances the capabilities of each will not need to accentuate the stress of competition and using the instrument of integrating background.
ATHLETIC QUALITIES OF THE YOUNG TUNISIAN ATHLETIC DEVELOPMENT

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Reminder of the current state:  
The physical preparation of young athletes Tunisian educational problems and perspectives

CITIUS, ALTIUS, FORTIUS:  
Required to adapt itself to the requirements of the high level:  
1. At the morphological level  
2. At the physical level  
3. At the physiological level  
4. At the psychological and mental level

PRESPECTION, DETECTION AND SELECTION:  
Absence of long-term strategy:  
1. At the level of basic clubs (training centers)  
2. Sector-based selections  
3. Regional centres  
4. National teams

Necessity of a statistical study

TO ESTABLISH A PROFILE

Parameters:
- ✓ Technical and tactical
- ✓ Anthropometric: weight, size(cutting), % of the fat mass
- ✓ Physical appearances(Physics): speed, strength, power, flexibility, stamina
- ✓ Physiological: vo2 max, Ventilatory threshold

Respect for the periods of development of the child and for the teenager:
- ■ Board of Cazorla
- ■ The established profile has to correspond to every category of age
- ■ Do not make a mistake about objective

Evaluation
- • Important tool which has to accompany and answer the specific needs of each of the stages susceptible to lead the young beginner to the highest level.
- • The results must be at once useful by the man of ground and
accompanied with an observation of the behavior in the course of learning of training and with competition.

- Diagnostic evaluation (detection of the talent) to discriminate the young people presenting the strongest potentialities
- summative and formative assessment: Evaluate the speed and the quality of acquisitions, and of The importance of the psychomotor development.

The chronological age and the biological age
Good prematurely obtained results can be the consequence of an accelerated maturation offering then only reduced margins of progress. On the other hand modest results for a given chronological age, can be excellent if they are studied compared to the real biological age of the estimated young person.

The methods of training

- Conception of an integrated (joined) method until 15 years.
- Look for new forms of organization (more motivation)
- Overcome the constraints with the patience and the love of the job and consequently the sport

Change THE ORGANISATION OF THE CURRENT COMPETITION
Plead for a shape of competition adapted to the age of the children and to the age of schools and juniors.

Conclusion
By the results realised by the national teams, the new classification among the world elite, compared to the surface and of the population of Tunisia owe establish(Constitute) not only a satisfaction, But especially a source of inspiration, of motivation, and of will for craftsmen Of the sport. En of the other term, think, innovate, and work of advantage to have a better sport, a more competitive sport in the scale of World... a sport of quality.
FORMATION OF TACTICAL ABILITIES OF CONDUCTING A COMPETITIVE DUEL AT HIGHLY SKILLED KARATISTS

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Introduction. Specific features of the higher sports skill in combat sports demand also specific methods of training, probably, essentially different from methods of training of simply qualified sportsmen. Concerning means of physical preparation the big methodical material allowing effectively raising level of impellent qualities of sportsmen is received during the last years. More than that, at modern system of competitions in karate it is difficult to achieve advantage over the contender in physical readiness. The increased density of conducting fight and intensity of actions of contenders in a certain measure level is also an advantage in level of technical readiness. Obviously, there is a special role of means of tactical and psychological preparation of the modern highly skilled karatist. By means of such means installations on forthcoming competitive activity are formed, those qualities of the sportsman which allow to realize its fighting possibilities with the greatest efficiency are improved, the condition of the sportsman before competitions is optimized, preconditions to the adequate decision of those tactical problems which arise in the course of a duel are created. In the given concrete case theoretical and practical possibilities of the interfaced application of means of tactical and psychological preparation in the uniform integrated system of tactical-psychological preparation of the karatists are considered.

The purpose: Perfection of system of formation of tactical abilities of conducting a competitive duel at highly skilled karatists. For object in view realization before research following problems have been put: 1) to define the complex maintenance of training loadings in system of sports preparation of karatists; 2) to develop the methodical approach to application of means of the interfaced tactical-psychological influences in the course of sports preparation of karatists; 3) to establish features of adaptation of karatists to loadings of the interfaced tactical-psychological preparation; 4) experimentally to prove and introduce complexes of the interfaced tactical-psychological influences in system of sports preparation of karatists.

Methods: the analysis of the literary data, pedagogical supervision and testing, pedagogical experiment, a method of video-watching and the analysis of competitive activity.

Results of research: Under the influence of system of the interfaced influences of tactical-psychological preparation private special abilities began to be shown is more expressed and is steadier that has allowed experts to estimate potential possibilities of karatists positively. Statistically authentic improvement of expert estimations (was observed at P <0.05), indicators of tactical abilities and a level of development of special mental qualities, and also integrated (total) the estimation has
improved even more authentically (at P <0.01). After application of special exercises of the interfaced character expert estimations in the sum have essentially exceeded a mean score «4» that it was not observed before application of means of the interfaced influences. Such fact can be estimated as criterion of efficiency of system of the interfaced influences applied by us on tactical-psychological readiness of highly skilled karatists.

**Total expert estimations tactical skill of karatists in process of the introducing the associate method**

*Diagram*

Conclusions

1. The interconnected development of tactical skills and mental qualities is an obligatory link (subsystem) in a control system of process of tactical-psychological preparation of the karatists. As "tactical-psychological" exercises which influence not only process of perfection of tactical skills, but also on creation of psychological preconditions for realization of such skills in conditional situations of single combat are applied.

2. Under the influence of system of the interface influences of tactical-psychological preparation private special abilities of the karatists began to be shown is more expressed and is steadier that has allowed experts to estimate potential possibilities of each sportsman positively. After application of special exercises of the interfaced character the integrated expert estimation has exceeded a point «4» that allows considering such estimation as criterion of efficiency of system of the interfaced influences applied by us on tactical-psychological readiness of highly skilled karatists.

3. Working out of scientifically well-founded technology of preparation of the karatists of high qualification on the basis of a method of the interfaced tactical-psychological influences opens possibilities for the increase of efficiency of process of achievement by sportsmen of high level training by the necessary period of time, in responsible competitions.
**Literature:**


PERFECTING TECHNIQUE IN LAP CHANGING IN RELAY FOR SWIMMERS WITH RETROFLECTION LOCOMOTION SYSTEM

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Keywords: relay swimming, lap-changing, pedagogical models “COACH-SWIMMER” and “SWIMMER-SWIMMER”, motor habits, marked lane, nosology groups swimmers, incoming/oncoming swimmer, the reserves of perfecting.

Changing the lap in relay swimming at Paralimpic swimming is of great importance. Touching the board in relay is defined at the Code of Rules. Extra delaying of a swimmer at start after touching the finishing board by the incoming one “can cost the gold medal”.

There are a lot of programs on coaching swimmers. But there is not enough material for participating in relay swimming and also the participants with retroflection locomotion system.

It is explained by absence of special technology and methods of perfecting technique at lap changing.

The special development of organized-methodical ways in the process of long term training for perfecting the technique of lap changing in Paralimpic swimming during training sessions is a topical problem for today.

The working hypothesis assumes the systematization of organized methodical characteristics for pedagogical models “COACH-SWIMMER” and “SWIMMER-SWIMMER” when developing technique of lap-changing the models will reduce the time of delay at start and make it easy at competitions.

The subject of our research is perfecting the technique of lap changing in relay swimming with retroflection locomotion system.

The aim is to discover reserves of developing lap-change technique and show its way in practice.

The tasks of our research are to work out the system of organized methodical ways for pedagogical models: “COACH-SWIMMER” and “SWIMMER-SWIMMER” when perfecting the technique of lap changing.

The methods of our research:
1. To analyze and substantiate scientific methodical literature;
2. To substantiate the experience of professors and readers working at the department hydrorehabilitation and staff coaches of the Russian National Paralimpic swimming team;
3. To discuss methods with coaches and swimmers;
4. Pedagogical observation with using of under water and above water shooting at training sessions and competitions.
5. Pedagogical experiment;
Investigation has been doing since September 2010 during training sessions of Russian National Paralimpic swimming team among the members in nosology groups in Saint Petersburg, Moscow, Taganrog, Dzerzhinsk.

The novelty of our research comprises all round investigation and systematization of work done by coaches in training Paralimpic swimmers. Our investigation allow to raise the level of attention concentration, motor habits readiness and as a result to train start more effective, to reduce as possible the time of lap changing.

The methods of perfecting technique at lap changing includes:
1. shooting lap changing at training sessions;
2. discussing the data obtained with swimmers;
3. special training of controlling all movements at lap changing;
4. control testing.

Conclusions:
- our investigations have found out and analyzed peculiarities of lap changing technique;
- it guarantees realization of worked out pedagogical models: “COACH-SWIMMER” and “SWIMMER-SWIMMER”
- and it gives the opportunity of progressing for members of Russian National Paralimpic swimming team.

The list of references:
Section II
Philosophic, Historical, Social Cultural Aspects of Physical Education and Sports
**THE INFLUENCE OF ISLAM ON THE DEVELOPMENT OF SPORT IN MUSLIM COUNTRIES**

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**Introduction:** Islam is one of the world religions that have followers on all continents. Islam has been spreading all over the world at the highest level. The adherents of Islam are Muslims. The most part of Asian and African countries population are Muslims. Muslim communities exist in more than one hundred twenty countries. They consist of one and a half billion people.

At present Islam is one of the leading religious systems in the world. It affects greatly the international sport movement.

The object of the research is sport and the Olympic Movement in Muslim countries such as Afghanistan, Iraq and Iran.

The subject of the research is the process of the development of sport and the O.M. in the abovementioned countries.

The tasks of the research are:
1. to determine the role of the Muslim culture in the development of physical education and sport in Muslim countries;
2. to make known the restrictions for Muslims taking part in sports;
3. to reveal the rules of participating in sport for Muslims;
4. to show the influence of Islam on the development of the Olympic Movement in the Muslim countries.

**The methods of the research are:**
1. Historical and logical method;
2. Studying and analyzing of archives;
3. Comparing and making analogy;

**Results:** In the process of the research some literature on history of Muslim countries and religious literature was studied. Physical education and the Olympic Movement in periodical press and in special literature were studied too.

The hypothesis of the research is: Islam prevents the development of the Olympic movement in Muslim countries. Islam prevents the Muslim countries participating in international sport events. Nevertheless, Islam takes care of the health and physical activities of Muslims.

From the Holy Quran one can see that Islam encourages physical activities of Muslims. It is said in the Quran that a Muslim should maintain his or her physical fitness. Obesity, physical weakness and laziness are abhorrent. A Muslim should be strong to worship Allah even in his or her old age.

«Any activity distracting a Muslim from worship Allah is time wasting, except target shooting, horse riding, playing with his or her family and swimming» (Al Quran 16:8).

Today Muslims are permitted to do almost all sports but within some limits and under certain conditions.
The main of the limits and conditions are:

- sport activities should not make a Muslim neglect his or her religious duties;
- sport activities should not make a Muslim attends forbidden places;
- a Muslim should keep the Islamic code of dress. Islam strongly forbids exposure of Satr (the area between the navel and the knees for males, all the body except a face and hands for females). Islam also forbids tight-fitting and transparent clothes;
- Islam forbids intermingling of sexes, but men and women may compete together if they are close relatives;
- parents should encourage their children to do certain sports. The sport should develop the strength and the adroitness of a child, it should not do harm to the child’s body and nature. The sport should be permitted by Shariah.

Shariah permits such sports as swimming (but the Satr has to be covered), discus throwing, javelin throwing, knife and sword throwing, shot putting, track-and-field-athletics, skiing-racing, arching, shooting, horse riding, camel riding, elephant riding, yachting, canoeing, car-racing, weightlifting (if the aim is to find the strongest person). All kinds of wrestling are permitted as a kind of self-defense, but wrestling competitions should not cause physical injury and hostility between the wrestlers. Body-building is permitted if the aim is to develop one’s strength and power but not to demonstrate one’s body. Football, tennis, golf, volleyball, basketball, badminton, handball and other sports with a ball are permitted if only they are not a means of earning. Gymnastics and acrobatics are permitted but the Muslim female athletes cannot take part in the international competitions because of the shameful sportswear. Such Olympic sport as synchronous swimming is forbidden because of the un-Islamic sportswear.

Muslim countries entered the Olympic Movement in the 1930s. Afghanistan was the first of them. It took part in the Games of the XI Olympiad in Berlin in 1936. Iraq and Iran took part in the Games of the Olympiad in London in 1948.

The number of the Olympic participants depended on the political situation in the countries. For example, 15 Afghanistan sportsmen took part in the Olympic Games in 1936, but only 4 sportsmen represented the country in the Olympic Games in 2008. Most of the Muslim Olympic participants were men because of Shariah laws. Only 22 Muslim women took part in the Olympic Games: 3 from Afghanistan, 4 from Iraq and 14 from Iran. Iran female athletes were the first to participate in the Olympic Games. It was in Tokyo in 1964. An Afghanistan woman, a participant of the Games of the XXVIII НДШШШШ was under threat of killing.

The sport achievements of the Muslim Olympic female athletes were not high. Concerning Muslim male Olympic participants, most of them were from Iran (409 men). 163 Iraq men and 95 Afghanistan men took part in the Olympic Games.

The main sports in Muslim countries are wrestling, boxing, track-and-field-athletics, swimming, judo, shooting and taekwondo.

**Conclusions:** To conclude it all, Muslim culture causes stagnation in the Olympic Movement of Muslim countries. Shariah laws affect sport greatly. They
prohibit some sports, restrict participation in others.

**Literature:**

COMPARATIVE ANALYSIS OF SPORT MANAGEMENT CURRICULA IN DIFFERENT COUNTRIES

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Introduction
Sport business is a field of education and vocation concerning the business aspect of sport. There are various jobs in the sport business—marketing, graphic design, sales, philanthropy, etc. But there’s increasing competition for these positions, with lawyers, communications majors, and business graduates. This explains the popularity of the numerous undergraduate sport management at higher schools all over the world.

Like any other field of study, there are variations in each school’s sport management program. Many colleges offer a variety of degrees. Here are several sport management programs of such countries as United States of America, France and Spain.

Methodology
In our study if Internet sources we used the survey and descriptive methods of research.

Results and Discussion
We have analyzed sport management programs of two higher schools in the USA. These are the SMWW (Sport Management Worldwide) in Oregon and the Concordia University in Chicago.

Sports Management Worldwide offers numerous sports job career training programs, specially designed to get one started in a sports job or advance one’s sports career. SMWW’s mission is to provide quality sports career education, along with the skills that professional sports and sports business specifically need.

Eight-week sports management training programs can be taken via the internet from anywhere in the world and include live interactive audio chats with prestigious mentors in the chosen field of study. With over 5000 alumni from 125 countries, Sports Management Worldwide has a proven success ratio.

Sports Management Worldwide’s intensive training is strictly for those individuals wanting to enhance their chances of gaining job placement in professional sports management. SMWW can assist the students with sports jobs in a variety of sports including hockey, soccer, basketball, baseball, motorsports, rugby, cricket and more.

Sports jobs for the graduates include: sports agent, player personnel, sport manager, administrator, front office, PR and community relations, sports marketing, sports broadcasting, account manager, media & communications, event management, ticket and sponsorship, athletic director, sports information director, coaching and track & field management.

Concordia University Chicago. The degree program in Sports Management is aimed at building the knowledge of business and sports issues. Graduates with sports management degrees find career positions as athletic directors, team managers,
account executives, talent scouts and more.

Among Concordia’s innovative programs is its “supervised work experience”, which allows students to receive academic credit while gaining practical work experience.

Concordia University Chicago in conjunction with Sports Management Worldwide can help launch their students careers in sports management profession. Learning with CUC is augmented via live weekly interactive audio chats with leading sport management experts. Students and faculty, along with sports industry leaders discuss various topics live via the internet. Weekly International Forum creates a virtual classroom where everyone can hear each other worldwide.

Next, we shall discuss the system of sports managers training in Europe. As an example, we have chosen the School of Sport Management in Paris (France) and European University in Barcelona (Spain).

Sports Management School (SMS) has the objective to meet the growing recruitment needs in the world of sports, and become the first national school in business of sport.

Over 30% of courses are offered in business; each student makes at least a 6 month internship in a company in France or abroad.

The education consists of two types of courses: the basic course and the specific course.

Basic course: Core subjects (technical management, marketing, communication, taxation); Intensive English.

Specific course: Sociology of Sport; Management and psychological approach to the athlete; Sports Marketing and Sponsorship; Studies in Sport Marketing; Economy of Media and Sport; Digital marketing; New media and online sports; Finance and Taxation in Sport; Introduction to Merchandising.

European University Barcelona Center of Management Studies offers undergraduate, graduate and executive MBA programs in Sport Management.

The course of the Bachelor of Arts in Sports management consists of 6 semesters. And the course of the Master of Business Administration (MBA) with Major in: Sports management consists of 3 terms.

**Conclusion**

During the 20th century, development of the sports industry has increased the complexity of the tasks of sports managers. This has facilitated the professionalisation of sports organisations and the development of specific academic curricula. Since 1966, when the first Master’s program in sport management was established at Ohio University (USA), there has been an enormous increase in academic activities in this regard. Today, there are over 400 colleges and universities offering a curriculum in sport management in the United States, Europe, Australia, Asia. It must be added that though all sports management programs are much alike each of them has its own peculiarity. The next stage of our research will be the comparative analysis of sport management programs of foreign and Russian higher schools.
References:
1. MBA & Bachelor Degree Programs in Sports Management, Europe, Spain, Barcelona - http://www.learn4good.com/great_schools/sports_management_mba_degree2.htm
TO THE CONSTRUCTION OF A FOOTBALL SUPPORTER
SOCIOCULTURAL PORTRAIT

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The contemporary world demonstrates some utmost interest of numerous people towards the sport phenomenon. As far as the sport is inscribed into the general contacts of social and cultural transformations of the 21st century, it inevitably displace some signs of its belonging to the epoch such as the up-to-date culture visualization, rise of hedonistic moods, the mass culture expansion, unprecedented increase of mass media influence towards the people opinion and demands that has intensified the sport requirements as some performance. The sport presentation as a show, a performance for the world vast audience, stimulated formation and heyday of the near sport world with a sport fan as its component.

A fan is not only a consumer of the product produced by an athlete or a sport club, but an investor as well inclosing his emotions and money. The fans appeared to be not classical investors, they don’t demand their money to be returned, but except bright emotions getting them as a result of their athlete or their team game, and of the process of support itself. Today the world fan movement has become a significant social phenomenon which has to be considered with and which can produce a considerable affect upon the society social life. The football fans appear to be the brightest representatives of the world fan movement. The football means much more for them than just a game; it is their way of life and their philosophy, producing a whole range of creative behaviour patterns and reactions concerning successes and failures of their beloved team, that is songs, banners, module- and fire-shows, etc.

Another aspect of this phenomenon appears to be the aggressive behaviour. The fan near sport crowd includes diversity of representatives of the social environments, differing by their mental appreciation of the sport values. There is a stratum among the fans for whom a sport show produces the chance to fight, to kick up a row, to make a pogrom. Now we are just thinking which way to finish with aggression, but the history demonstrates that the situation is not so simple. The football fanatism has a rather negative background, displaying itself in the contemporary reality.

When the football was separated from rugby at the beginning of the 20th century, it was becoming to spread in the world displaying itself as a game of the educated men, because the football was expended along Europe and America by English engineers and workers, having the professions which demanded a rather high level of qualification and education.

The situation was changed in the 60th of the 20th century, when the mass fan struggles became a rather wide spread phenomenon. In England the game for millions became a cause for the mass youth fights. Almost one hundred % of the football hooligans of the 60th were composed of working youth of the city outskirts with minimum of education and salary, hard monotones work and without some social
support. It is at that time the appearance of a classical football fan was formed with heavy working boots, rough trousers with suspenders, a doc jacket and short cut hair.

It was in 1973 when the Europe first met with English fans at the match of Feyenoord Rotterdam and Tottenham Hotspur London.

In 1982 the world championship took place in Spain, when the local fans came into collision with the British fan culture and with a quite alien element of the football culture – that was with violence. The Spanish fans came to the recognition that struggle and hatred can produce some sharp feelings. Just after the championship in Spain there appeared the first radical fan groups. The 90th became the period of heyday for the continental fan groups. Just at that time there appeared the famous Combat 18, the terrorist right radical group of a Nazi sense and almost immediately it joined the Headhunters group that supported Chelsea. Their main rivals became Tottenham fans, the fact that split the football fans united before.

The fans had become too strong and hardly predicted power. And the State power aimed to decide the problem of hools, repressing the fan groups instead of eliminating the youth problems. It declined the English fanaticism which moved to eastern and southern Europeans.

Now among the European fans as compared with the English ones, the Greece fans are considered to be the most fierce. Fights with lethal results, using fittings, knives and chains has been practicing by them for a long time.

The Serbian fans were also distinct by their mad reputation: in the 90th up to the war of 1999 each collision between the fan groups was finished with the death of several people. Such fierce fights among Serbian fans were stopped after Zhelko Razhnatovich (the head of Delije firm) murder and finishing the 1999 war.

But the Turkish fans are considered to be the most fierce in Europe. The traditions of football hooliganism in Turkey are very old, for the first collisions with lethal results were displayed in 1911 between the fans of Galatasaray and Fenerbahçe. In fights the Turks use long sword-like knives. In 2000 two fans from English Lids were killed with the use of such knives. The Turks display such incredible cruelty unknown in Europe, even in the collisions between each other. There is now explanation of such cruelty by social courses as well as other courses among the Turkish fans that could be done even by the Turks themselves.

So we can say that the sport fanaticism origin does not have this or that definite reason. It can reflect the social situation in the country, its troubles make impossible quick elimination of the football fans aggressive behaviour. It also ought to take into account other components such as peculiarities of the people mentality, psychology and some other factors.

References

THE INVESTIGATION OF THE MUSIC ACCOMPANIMENT USED IN SINGLE MEN FIGURE SKATING AFTER THE CHANGING OF THE JUDGING SYSTEM

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**Introduction**

One of the most important problems of figure skaters is the choice of musical accompaniment for their competitive programmes. The music determines the composition of the programme, its artistic value, character and manner. This work is devoted to the statistic analysis of music accompaniment in single men figure skating within last 6 years.

The Object of the Research: short and free programmes of high level athletes (men).

The Subject of the Research: music accompaniment in single men figure skating.

The Hypothesis of the Research:
1) The music accompaniment in figure skating is developing in compliance with modern tastes and figure skater’s preferences.
2) The music accompaniment did not cardinally change with the transition to the ISU (International skating union) judging system.

The Aim of the Research: to find the most frequently used music genres in single men figure skating and to compare it with modern tastes and preferences.

The Task of the Research:
1) To make the statistic analysis of the music accompaniment in single men figure skating.
2) To make the percentage ratio of different music genres used by athletes as accompaniment for each year of investigation (2005-2011).
3) To make the comparison of percentage ratio of different music genres used by athletes as accompaniment for each year of the investigation (2005-2011).

The Methods of the Research:
1) Video materials of different ISU competitions (the European and the World Championships and the Olympic Games)
2) Analysis of various literature including ISU documents and different music classifications.
3) The method of mathematical statistics.

**Results**

Separation of music accompaniment in to different genres was made according to the most frequently used music genres in figure skating. This classification includes classical music, soundtracks, country and folk music, latin music, pop-music and instrumental music.

In conclusion percentage ratio is:
40 % - soundtracks
20,5 % - classical music
15% - instrumental music
14% - pop-music
5,5% - latin music
2% - folk or country music
3% - other genres

**Conclusion**

This topic has practical significance in sphere of high level athletes where the importance of character and personality is unquestionable. Specific requirements of the music accompaniment make the selection of it quite difficult. Right evaluation of modern tastes and figure skating trends can help top level athletes to reach higher results (with the help of higher Component score, in particular for Interpretation).
THE PROBLEMS IN THE DEVELOPMENT OF STUDENT SPORT IN RUSSIA

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**Used methods:** document analysis, analysis of references and generalization.

**Introduction:** In most developed foreign countries student sport is the basis of national sporting and educational policy. Most of the members of the national teams of these countries in many sports are athlete-students.

**Results:** Every two years the International University Sports Federation (FISU) holds world championships among students. The European University Sports Association (EUSA) organizes the European Championships every year. World Student Games have always been a major student competition. This is the second international integrated sporting event after the Olympics by value of relevance, entertainment, popularity and scope.

Despite the successful performances of Russian athlete-students in the World Student Games and Championships there are objective problems that currently do not allow the student sporting movement to become the foundation to form healthy lifestyle of young people and to develop Russian sport. These are the problems:

1. Lack of existing regulatory frameworks. At present, the existing legislation leaves the student sport outside of legal regulation.
2. Lack of central government funding the All-Russian Student Games.
3. Total or partial absence of the material and technical base in many universities in Russia: stadiums, gymnasiums, swimming pools, ski resorts, sports facilities and so forth.

**Conclusions:**

1. It is necessary to establish the foundations of public policy and government guarantees of the Russian Federation in the field of student sport and also to assign levels of competence of the federal center and the regions.
2. Planned funding for student sport in Russia will bring hundreds of thousands of students in higher and secondary specialized educational institutions to sport. It also will allow to optimize the structure of the nationwide calendar of competitions. At last it will create a complete system for training local athlete-students and their participation in domestic and major international competitions.
3. Budgetary and other funds for the construction, development and maintenance of material and technical base will solve the problem of the lack of modern advanced sports facilities in the universities of Russia.

**The literature**


Introduction. Physical activity and sport play an ever increasing role in all of our lives. The enjoyment of participating in physical activity is well known. Of equal, if not greater importance, is our emerging understanding of the benefits that physical activity can bring to our health and well-being. It has long been appreciated that physical activity can help maintain a healthy weight, improve stamina and increase strength and flexibility.

But what is becoming increasingly known today is that regular physical activity can help decrease the risk of some of the key diseases of our times.

More and more evidence is emerging that physical activity benefits health and well-being. Physical activity, health and well-being is designed to help build that awareness and understanding. It shows that physical activity can benefit everyone, everywhere throughout their life cycle.

Evidence is emerging that physical activity, even at fairly moderate levels, reduces the risk of some of the most serious diseases, e.g. obesity, high blood pressure, coronary heart disease, diabetes and even cancer.

Controlling weight. Obesity is a significant health problem in many developed countries. It can be lead to increased risk of coronary heart disease, diabetes, stroke, arthritis and accidents.

Coronary Heart disease. The risk of coronary heart disease is progressively reduced with increasing levels of activity. Sedentary individuals have double the risk than their most active peers. Physical inactivity is as important a risk factor for heart disease as hypertension, high serum cholesterol and cigarette smoking.

Stroke. There is evidence of reduced risk of strokes in active individuals. However, this may be accounted for by reductions in the associated risk factors of high blood pressure and obesity rather than the “stroke” itself. Regular physical activity during early adulthood may confer some protection from strokes later on in life.

Mental health: Feeling better inside and out. Although the effects are difficult to measure, most researchers agree that exercise has beneficial psycho-social effects.

Anxiety and stress. Exercise is associated with small to moderate reductions in anxiety, when anxiety is assessed by either physiological or self-report measures.

Depression. Recent studies report that exercise reduces depression in both clinically depressed patients and non-clinical populations. Those requiring medical or psychological care showed the greatest benefit, but all subjects showed some positive effects, regardless of age, sex or health status. Exercise was as effective as psychotherapy, although exercise plus psychotherapy was a better anti-depressant than exercise n its own.
Mood and well-being. Extensive studies of psychological well-being have reviewed the broader areas of anxiety, self esteem, mood and self-confidence. Whilst the results are somewhat mixed, the majority support a positive relationship between physical activity and psychological well-being and self-esteem.

Personality and adjustment. Defining and measuring personality is fraught with problems, but overall the data suggest that physical activity may bring about favourable changes in personality and psychological adjustment.

Cognitive functioning. This is another area where definitions and measurements are difficult. The most reliable measures of cognitive functioning are mathematical performance and reaction time. One study found a stronger positive relationship between physical exercises and improved cognitive functioning when the exercise was sustained rather than intense. The relationship was stronger for females than for males. In contrast, another study found no effect of physical exercise on the academic performance of schoolchildren.

Character. It has been widely asserted that participation in sport “builds character”. In reality, the relationship is unclear as both positive and negative effects have been found. In team games young children have generally been found to develop pro-social behavior, whereas classic studies in psychology have shown that competition increases feelings of rejection and hostility. There appears to be a negative correlation between involvement in aerobic exercise and delinquent behavior. This could be explained by the positive mental health effects of exercise and changes in self-esteem.

Physical activity for everyone, everywhere. To encourage an increase in activity levels for all, it is important to understand the barriers to physical activity and exercise. Many of these have been identified and they are summarized below.

The barriers. Those who are more likely to become inactive are: the elderly, smokers, overweight or physically challenged individuals, those who exercise alone, adolescent girls, those reaching the end of compulsory physical education, those who become parents, especially working women, low income groups, less educated individuals, members of minority groups.

Conclusion. Physical activity positively influences physical and psychosocial health. It is important at all stages in the life cycle, from childhood to extreme old age.

- Exercise has a consistent beneficial effect on mood and psychological well-being, anxiety, depression, and psychological stress and may enhance cognitive functioning.
- Physical inactivity seems to be less common in developing countries but will become an issue with continued development and urbanization.
- Promotion of physical activity for children, adolescents, young adults, the middle-aged, and older adults is one of the most effective means of improving health and enhancing function and quality of life.
Keywords: physical education, physical abilities, social relation, attitude, elementary school student

**Introduction:** It is well accepted that at primary school age is mainly dominated by affective factors, however our tradition of the education does not favor the complex development.

The topics of educational researches are the roles of social relation and affective function in academic performance. (Csapó, 2000)

The aim of our study is to analyze the change in physical condition, social interaction and attitude among students in elementary schools with additional physical education.

Our hypothesis is that the advance physical education – after one school year – causes positive change not only in the physical performance but also in the social behavior and in the emotional relations.

**Experimental groups:** The participants were 8-9 years old students from seven different elementary schools in the XII. District of Budapest, Hungary (N=288) in 2009/2010 school year.

**Experimental method:** Physical tests of motor skills: 15m endurance shuttle run, 10x5 m shuttle run by time, sit up and standing broad jump.

Sociometric status was measured with Shellenberger’s Group-Evaluative Method (1990). We extended the matrix to the ‘Y’ scale (Kovács, 2004) which graphed the average score (on a 5 point scale) the student gave to each classmate, which is a measure of how willingly they would they participate in a game with each of their classmates.

We analyzed the emotional reactions with Hamar and Karsai’s (2008) simplified questionnaire according to our age-group.

**Results:** The additional physical education class showed significantly better performance in many physical tests than the control group (15m endurance shuttle run: p=0.004779, 10 x 5 m shuttle run on time: p=0, standing long jump: p=0.014117). The physical condition test results showed that qualitative physical education classes reduce the physical performance differences between the two genders (15m endurance shuttle run: p=0.007284). The sociometric study proves that physical education and social abilities are strongly related to each other. Additional PE creates a better ambience in the community. The attitude test shows that students are motivated to exercise and to participate in PE. In this age-group there is no difference in relation with PE lesson between genders.
Summary: Nowadays evaluation of schools, educational programs and assignment of development methods get more function. Every school year is a new opportunity for educators because both social skill and motor skills are teachable and learnable (Trower, P. – Bryant, B. – Argyle, M. 1978)

Long-range, conscientious works requires years of data, and thus we plan to continue our assessments for two more years, until the students graduate from the 4th class.

Preference
Kovács K. (2004): Kooperatív testnevelési játékok hatása serdülőkorú leányok személyiség jellemzőire és az iskolai közösségek alakulásra, ELTE, Neveléstudományi Doktori Iskola
EMOTION, FEELING AND THOUGHT

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Some things in life cause people to feel, they are called emotional reactions. Some things in life cause people to think, they are sometimes called logical or intellectual reactions. Thus life is divided between things that make you feel and things that make you think.

Some things in life can cause more emotion than other things:
- color causes more emotion than black and white;
- things that are personal are emotional.

But there are things that cause thought. Thought is a period of thinking, a period of increased attention. There is an overlap of feeling and thought. But there are still parts of thought that don't have feeling or emotion in them, and parts of emotion that don't have thought in them. You can be emotional and have more attention, but usually if you are emotional you are going to be less attentive than you would be if you were thinking. If you are emotional you are being attentive to your emotions. You can pay attention to something and not be thinking about it at the same time. It seems that thought is more attention than emotion.

Thoughts and feelings correspond. That is, if you are thinking it is bad, then you are going to feel that it is bad. Thus thought and feeling are really one and the same, but thoughts are really clearer than feelings. Thought and feeling may result in the same amount of attention to something, but thought is more precise. It is more precise for you to think that the computer is good, then to feel that the computer is good. Emotions and feelings are more obscure. Emotion is just unconscious thought. Thought and feeling are really just periods of focus on certain things. With thought you just recognize what it is that you are focusing on. With emotions you feel deeply about what you are focusing on. It is logical that thought actually has root in feelings. You take two feelings and can arrive at one thought. Take the feeling of a frog moving and the feeling of a threat of danger. The two feelings combined equal the idea or thought that the frog needs to move when there is danger.

The difference between emotions and feelings:
- Emotion is more similar to conscious thought than feelings are. Feelings are more like sensations, when you touch something you get a feeling;
- Feelings are faster than emotions and thought, because when you touch something there is a slight delay before you can think, or feel about it;
- There is a large overlap between how feelings feel and how emotions feel, they are similar in nature. One definition of emotion can be «any strong feeling»;

Basic (or primary) emotions can be made up of secondary emotions like love can contain feelings or emotions of lust, love and longing. Feelings can be described in more detail than emotions because you can have a specific feeling for anything, each feeling is unique and might not have a name. So there are only a few defined emotions, but there are an infinite number ways of feeling things. You can have the same emotion of hate in different situations, but each time the feeling is going to be at least slightly different.
Feelings are more immediate: if something happens or is happening, it is going to result in a feeling. Feelings are easier to identify than emotions. Feelings are faster than emotions in terms of response and it takes someone less time to recognize feelings, because they are faster. Feelings are closer to sensory stimulation, if you touch something, you feel it and that is a fast reaction.

Things that come from memory are going to be emotions or thoughts, not feelings because feelings are more tangible. Thought and feeling are indeed separate and intelligence is sometimes driven by feelings and emotions, and sometimes it isn't. You can think about things and not have feelings guiding those thoughts. Or your feelings could be assisting your thoughts. Such is an interaction between feeling, emotion and thought.
The relevance of the study: The development of physical education and sports in the Russian Federation is closely related to the improvement of the nation’s health, the demographic situation, the education of the growing generation. The 2009 country-wide clinical examination showed that only a third of country’s children are absolutely healthy. The measures of physical culture and sports in the preventive activities of protection and strengthening of health, the fight against drug addictions, alcoholism, smoking and law offenses have a great effect, especially among teenagers. That is why the problems of increasing the efficiency of physical education among the growing generation and the importance of development of youth sports are highly stressed in the federal program “Development of physical education and sports in the Russian Federation in 2006-2015”.

We live in an information society, the main quality of which is the increasing role of information, knowledge, and information technology in the life of the society itself. The federal program proposes to use media to create an effective propaganda of physical culture and sports that includes promotion of values of a healthy lifestyle by wide coverage of sports activities and, in particular, youth competitions to create sufficient publicity and transparency of these events.

In small towns, the problem of youth sports promotion is the most acute. This is caused by the absence of an established system of communication between youth sports schools and the local committee of physical education and media.

The most accessible media in small towns are newspapers. Many publications are distributed free of charge in shopping malls, others are sold at press kiosks a price well lower than that of central media. The main channels of promotion of youth sports are the printed media.

The object of the given study is publications in local newspapers about youth sports.

The subject of the study: forms, means and methods of promotion of youth sports through the printed media.

The objective of the study is to identify technologies used to promote youth sports in the printed media in small towns.

According to following, the research sets the following aims:

1. To analyze scientific literature on public relations in promoting sports through printed media by theoretical analysis and summarization of literature;
2. To characterize the state of youth sports in small towns (on the example of Obninsk);
3. To research the genre and thematic features of materials on the sports theme in the printed media of small towns (on the example of Obninsk);
4. To identify the verbal and visual methods of youth sports
promotion in the printed media of small towns;

The empirical base of the study is based on articles in the newspapers of Obninsk: "People's Newspaper - Region", "You and We", "Obninsk," "Week of Obninsk." [1, 2, 3, 4] These publications are not municipal, the frequency of their releases - weekly.

The criteria of selection of media were: the popularity of publications in the town, based on statistical calculations, the presence of articles on sports topics. The chronological limits of selection were from 1st of June to 31st of December 2010. This period is full of political events in the life of the town, the most important of which were the assignment of the new head of town administration and the town council elections. These events helped to raise the citizens’ attention towards local press reports.

After analyzing the state of youth sports in small towns on the example of Obninsk, we found that despite of the large number of different sports that exist in Obninsk, the development of youth sports in small towns is uneven. The development of youth sports requires a whole range of measures, which include the establishment of an effective mechanism to attract funding from various sources, including the budgets of all levels and non-budgetary funds (sponsorship). The legal base alone is not enough to attract funding from budgets. In addition, the development of youth sports should be made of interest to the town administration and the residents themselves. This requires awareness-raising activities to support youth sports in the town. Local printed media should be used as the means for carrying out such activities.

Media of small towns are able to achieve greater success in promoting a healthy lifestyle thanks to the availability, closeness to their readers, listeners, and viewers. They have the ability to carry out a comprehensive approach to this problem, taking into account socio-cultural characteristics of a given region, to invoke actual and potential sports fans into the fight for healthy lifestyles, to seriously impact on officials (heads of sports committees, representatives of local authorities, etc.), who are able to solve particular problems associated with the development of youth sports in the given region.

After analyzing the publications in the local printed media on sports themes, we have identified particular genre scenes of published materials. Among the information and analytical genres in Obninsk’s newspaper headings about sports only notes, informational and analytical interviews, and practical-analytical articles were used. The absence of such genres as conversation, reportage, investigative journalism, analytical and informational correspondence and reports is caused by the lack of highly skilled sports journalists in the editorial offices of newspapers, the deficiency of political activity in the field of sport in the specified period of time, as well as the small amount of space allocated for the sports category in Obninsk press. The arts genres group is not represented in the local press at all. These genres require a large amount of space in the publications, and newspapers are not able to grant several columns to sports publications, written in an artistic genre. Thus, we can say that, despite the fact that the town press uses a wide range of journalistic genres to inform the public about the field of sport, there are still enough effective genres that
can throw light on this area.

Based on the theme of the research, the most important trait of sports publications for us was the age of people, described by journalists in the materials. After monitoring the media on this subject, we found that the percentage of publications on youth sports in relation to other sports publications is 25%. Most of the materials were about athletes 20-26 years old. The local media is underestimating the value of physical education and sport at the early stage of a person’s development. The small number of publications on this subject has a negative impact on the effectiveness of promotion of youth sports in the town.

In general, promotion can be reduced to two main tasks: 1. Education and reinforcement of certain desirable and useful ideas, concepts, attitudes, habits and beliefs, etc. 2. The destruction, suppression, and change of unwanted ideas, concepts, beliefs.

On one hand, parents' attitudes to enrollment of children in sports clubs is positive, since the adult population of Obninsk is aware of the usefulness of engaging children into sports, as well as their positive impact on the formation of the necessary psycho-physical qualities, as well as the strengthening of health. But on the other hand, in such small towns like Obninsk as there is an overflow of other, alternative to sports activities. Parents give preference to non-sports sections, mostly guided by the fact that sports are associated with high injury risk. Therefore, the promotion of youth sports in small towns should be based on both problems.

In order to achieve maximum effectiveness of promotion of youth sports through the printed media in small towns a certain spectrum of complex verbal and visual methods appropriate to the specifics of physical culture and sports and to the social perception of the population of small towns needs to be used.

The practical importance of the work is that the basic theses and conclusions of the study can be used by the Committee on Physical education and Sports in Obninsk, by the press services of youth sports schools to develop a plan for cooperation with journalists and editorial services to improve the quality of coverage of events associated with youth sports in the printed media, to increase the popularity of youth sports among the population of Obninsk. Improving the quality of youth sports coverage in the media can help to attract sponsors, which is important for adequate funding of physical culture in a small town.
VOICES FROM THE MARGINS: A NARRATIVE EXPLORATION OF THE MULTIPLE REALITIES OF COACHING

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Right boys this one’s important. We’re 1-0 down at half time and you lot are playing like muppets. There’s no heart, no grit. You need to fly into tackles and let them know they’re in a fight. You’re just not competing with them, get stuck in and fight for this game, have you got no pride? You’re letting me down, the club down and each other. This is just a load of rubbish, I thought you lot could play?

There is an acceptance that sports coaching has as its primary focus, the improvement of individual and team performance (Jones, 2005) and that effective coaches are those that have progressed furthest in terms of formal hierarchical (National Governing Body) sporting qualifications and degrees in related subjects (Pullo, 1992). It is suggested that ‘traditional views of coaching have located it [coaching] within a bio-scientific, product-oriented discourse’ (Cassidy et al., 2004:175). That is to say, that coaching has been seen as unproblematic and straightforward and in fact coaches (and educators) are seen as being able to pass knowledge on to others (hence the notion that coaches are performance improvers).

It will be argued that the journey of becoming a coach is situated in formal, nonformal and informal contexts and that coaching and coach education literature must address and fully embrace the reality of sports coaching and how we become coaches. To do this, it is essential that we seek to (re)define what is at the ontological core of sports coaching if we are able to attempt to illuminate the reality of the practice. Coaching has emerged not only as a profession (Woodman, 1993) but also as a research field in its own right (Saury & Durand, 1998; Jones et al., 2003) yet coaching practice still remains close to the fictional auto-ethnographical account (Sparkes, 2002) of coaching in action that opens this abstract.

This fictional representation of an interface between an athlete and a coach is important, because this is often what practitioners are exposed to and consequentially regard as real coaching. This presentation will attempt to provide a critical overview of coaching literature, in particular relation to coaching (Jones et al., 2004), coaches’ knowledge (Cushion et al., 2003), coach learning (Nelson et al., 2006) and development of expert coaches (Schempp et al., 2006). In order to do so, the presentation will take the place of 4 short stories (narratives) that are autoethnographical (Coffey, 1999; Markula & Denison, 2005; Okley & Callaway, 1992; Reed-Denehay, 1997; Sparkes, 2000; Van Maanen, 1995; Young, 1991) in nature making them accessible to coaches, but also framed theoretically in knowledge construction (Nelson et al., 2006) in order to foster academic debate regarding how knowledge is constructed through the formal, nonformal and informal.
MANAGEMENT METHODS IN LOGISTICS

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The quantitative school of Management as a science has put management decisions in direct dependence on advances in mathematics and computer science. The subject of logistics as a direction of economics is the organization of rational process of promoting goods and services from producers to consumers, the functioning of products circulation sphere, inventory management, goods movement infrastructure.

From a position (In the framework) of management the logistics can be considered as a strategic management of material streams in the course of purchase, supply, transportation, sales and storages of materials, details and ready-made stock. The logistics is directed on expenses optimization and rationalization of production, sale and accompanying services both within one enterprise and a group of the enterprises.

There are various logistical systems to apply depending on company’s specificity. According to their purpose these systems should cover practically all lines of activity (except accounting, human resources etc.). Inventory management and transportation are the kernel of logistical system. Coordination of two these directions can bring significant economic benefits both for enterprises and for consumers. Traditionally, at each stage of supply chain management decisions are made independently of each other. Different subdivisions of the company are responsible for inventory management and transportation. Development of communication and information technologies, computer networks spreading, improved transport infrastructure and increased competition have created the preconditions for the development of more efficient logistics systems.

Raw materials suppliers, manufacturers, wholesale suppliers and distribution centers (distributors), retail suppliers (retailers), consumers are usually participants in the supply chain. Strategies which are optimal for each of the participants of the logistics process may be ineffective for the supply chain in general. To improve the efficiency of the logistics system it is necessary to integrate supply chains.

The quick response concept (QR) was developed by a leading American textile and clothing companies to deal with unreasonably long lead times [1]. Application of the quick response method became possible after the development of suitable information technologies, including electronic data interchange (EDI), bar coding and laser scanners. The essence of the QR method is to estimate demand in real time as close as possible and as close as possible to the consumer. Thus, in order to benefit from the use of QR, it is necessary to exchange information about the demand level across the supply chain.

The concept of an efficient customer response (ECR) was developed in 1992 by industry leaders of day-to-day goods and is the development of quick response. One of the priorities of ECR is to reduce out of stock factor. Such absence can be caused by late or incomplete delivery, delivery of defective or unordered goods,
errors in ordering or sudden increase in demand. To reduce this factor automatic checkout system of goods availability is being introduced, that gives an opportunity to monitor stock of goods. Besides, the history of sales which allows to predict changes in demand and, thus, to order the required quantity of goods in optimal time is stored and analyzed.

The next step in logistics systems integration was the appearance of vendor managed inventory (VMI), first proposed and implemented by Wal-mart, the world's largest network of retail stores. VMI technique assumes all responsibility for clients inventory management rests on the vendor. The concept of VMI is more than just a partnership program between the participants in the logistics chain because inventory management on the side of the supplier includes not only the exchange of information between partners, but also more radical changes in transportation and storage management. In accordance with detailed contract between the distributor and retail supplier, distributor takes control of the stock of retailer. Distributor makes decisions about when, who and how many products to supply in order to prevent the stock-outs at retailers. Such decisions are based on information about point of sales, obtained from retailers. Thus, the VMI program saves retailers from having to send orders to the distributor, as well as the need to deal with inventory management. VMI for distributor is a powerful tool that allows to build policies both in management and replenishment, shipping and production, based on information on point of sales, and to reduce expenses.

According to the results described in paper [3], the implementation of VMI program gives a number of advantages and constraints for suppliers and consumers.

1. Ceteris paribus VMI strategy allows the supplier to reduce inventory levels more than QR, which by turn would be more efficient than usage of traditional techniques of inventory management and transportation.
2. In addition, the higher the average level and volatility of demand, the greater the benefit gets a distributor from reducing the amount of insurance stocks.
3. A low inventory level implies increasing the frequency of deliveries.
4. An important advantage of VMI programs is the ability to use transport resources more efficient.

It is necessary to note that the greatest benefit from the VMI implementation, usually receives a wholesale supplier compared with a retail supplier [3].

**Literature**

THE ROLE OF SOCIOCULTURAL RESEARCH ON DOPING

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The use of performance-enhancing substances (PES) in sport is referred to the term “doping”. There are many suggestions as to the origin of the word “doping”. One is that it is derived from “dop”, an alcoholic drink used as a stimulant in ceremonial dances in 18th century Southern Africa. Another suggestion is that the word comes from the Dutch word “doop” (a thick dipping sauce) that entered American slang to describe how robbers stupefied victims by mixing tobacco with the seeds of Datura stramonium, known as jimsonweed, which contains a number of tropane alkaloids, causing sedation, hallucinations and confusion. By 1889, “dope” was used in connection with the preparation of a thick viscous preparation of opium for smoking, and during the 1890s this extended to any stupefying narcotic drug. In 1900, “dope” was also defined as “a preparation of drugs designed to influence a racehorse's performance”.

Doping is commonly regarded as cheating, and thus as a serious violation of the moral precepts of sport. Today, however, the subject is not just a matter for ethical consideration, but a serious concern for medical and legal authorities with their focus on where, when and how an alleged doping offence took place.

So we could assume that by this time the use of PED and doping phenomenon have been studied only through natural and sport sciences within these two disciplines fit the large number of sub-disciplines such as physiology, biomechanics, sport psychology, sport sociology and ethics. Sociocultural research on doping phenomenon in their broadest cultural, social and political dimensions has not been organized at the decent level in this country.

Numerous texts highlight the medical, legal and other features of doping; only few data are available regarding sociocultural aspects of this issue. However, The International Network of Humanistic Doping Research (INHDR) was established in 2002 at the University of Southern Denmark. The intention was to share and encourage research on doping practices, as to offer perspectives that may differ from the standard anti-doping doctrine that underlies the official “War on drugs” in sport.

The idea arose from the observation that the doping phenomenon has been put on the political agenda as a cause for concern without sufficient attention to the nature and complexity of the doping problem. The initiative was taken by scientists who share the opinion that the use of doping techniques poses a threat to the integrity of sport and to athletes’ health, but who also hold the view that initiatives undertaken against those threats that are not based on research and rational reflection may be as harmful to sport, to athletes’ health, and to society at large than the problem such initiatives are meant to solve.

It seems that the elite sporting hegemony has turned its back on doping as the number one scandal in sport, preferring now to promote the impact of organized crime. So it becomes a good idea to look to where doping occurs in broader society.
Emergency and military service can represent abnormal contextual extremes where doping can be reconstructed in life or death terms. Doping occurs in other elite contexts. For example, Brantigan and colleagues reported the use of beta blockers by classical musicians. Doping in this context helps calm musicians down and steadies hands, enabling better delivery of a piece more likely to receive positive reviews and larger audiences. Doping in the academic context is very real: a law student could be using a combination of modafinil and methylphenidate to study (train) longer and harder in pursuit of an internship at a prestigious law firm. So, in practice, limiting our understanding of doping to sport obscures wider social issues around doping.

Also it is necessary to add that the issue of doping and PES in sports and its influence to society might require a cross-disciplinary approach that integrates research from three of academia’s dominant cultures—the natural sciences, social sciences, and humanities—to shed new light on the issue of doping and performance enhancement in sports.

Bibliography


SYSTEM OF PHYSICAL EDUCATION TEACHER PREPARATION IN THE UNITED STATES

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**Introduction.** Modern life puts up new tasks to the training of teachers of physical education. The introduction of the third lesson of physical education in Russian schools requires new standards and technologies in the educational process, especially connected with children’s health and physical activities. That’s why while conducting our scientific research on contemporary analysis of American and Russian Physical Education programs, we decided to discover the details of American approach. **Objective.** The objective of research was to reveal the positive tendencies of preparation of PE teachers in the US so as to analyze the possibilities of adapting the experience for improvement of Russian system of PE teacher preparation.

**Discussion.** According to A national program of the Robert Wood Johnson Foundation “Active living research” in schools across the United States, physical education has been substantially reduced—and in some cases completely eliminated—in response to budget concerns and pressures to improve academic test scores. Yet the available evidence shows that children who are physically active and fit tend to perform better in the classroom, and that daily physical education does not adversely affect academic performance. The Surgeon General recommends children should engage in 60 minutes of moderate activity most days of the week, yet estimates show that only 3.8 percent of elementary schools provide daily physical education (PE).1

U.S. schools have drastically reduced their physical education programs in recent years; fewer than ten percent of all public schools now offer daily physical education classes. Although the National Association for Sport and Physical Activity recommends at least 150 minutes of exercise a week for elementary students and 225 minutes a week for middle and high school students, most schools offer far less.

Now elementary classes have PE for a half-hour four days a week, and gym-like activities at recess on the fifth day. Middle school students have PE for 40 minutes each day. The curriculum is designed to get students moving and appeal to everyone, regardless of athletic ability. There are units on everything from softball to wrestling to field hockey. Traditional forms of PE have been mixed with other activities, such as hiking, walking and bowling to encourage students to engage in fitness activities that can become habitual by adulthood. Yoga is also being taught by some teachers to help raise the level of interest and motivate students to be more physically fit. In the United States, teacher preparation in physical education originally had close links to medicine. A program of study would commonly include anatomy, physiology, health, first aid, history and philosophy, educational psychology, and various physical skills—from gymnastics through dance, games, and sport. Major shifts across time have largely involved the length of programs of study.
on each of these topics.

At the beginning of the twenty-first century, the requirements for physical education teachers vary somewhat by state, since education is governed at that level rather than by national standards. The National Association for Sport and Physical Education (NASPE) has published guidelines for beginning teachers in an attempt to provide some professional leadership. These guidelines are not binding on either institutions preparing teachers or on state governments, where the responsibility of licensing teachers rests. In a collaborative effort with one of the major accrediting agencies for teacher preparation programs, the National Council for Accreditation of Teacher Education (NCATE), NASPE has created guidelines for programs seeking accreditation in the preparation of physical educators for initial certification.

**Current Structure.** Physical education teacher education (PETE) programs in the United States are designed around at least three models and five conceptual orientations. One model is delivered at the undergraduate level and two at the graduate level. At the undergraduate level, programs are usually delivered in a four-year program with course work in three major areas: general education (e.g., the broad concepts in many fields that the general public associates with an educated citizen), professional education (e.g., concepts specifically linked with what is known about teaching and learning), and content knowledge (e.g., the information unique to the field, often represented in a variety of subdisciplinary areas such as exercise physiology, biomechanics, and motor learning). The actual number of credits and sequence of these courses varies and is often dependent upon the philosophical orientation of the program and resources available to the faculty. In this approach, students study for a four-year degree in the content area supporting the type of licensure they seek. In physical education, an undergraduate degree could be in sport studies, exercise physiology, biomechanics, or some other related subdisciplinary field. At the master's level, students then study the pedagogical content to learn how to deliver the content knowledge to students. This approach is a response to perceived needs of teachers to be better prepared in the content knowledge of their field.

A second type of graduate PETE program is sometimes characterized as a response to teacher shortages. In this approach, candidates have typically acquired an undergraduate degree in some field other than physical education. Graduate programs for this approach must include a combination of content knowledge and professional education. Students changing careers are often attracted to this model.

The *academic* orientation holds that the subject matter knowledge is central. The focus of these programs is on games, sports, dance, and fitness knowledge. In the *practical* orientation, experience and conventional wisdom are the focal points. Field experiences are key parts of these programs, where students are given ample practice time with practice-proven methods of teaching. The *technological* orientation has also been characterized as systematic, science-based instruction where there is an emphasis on mastering teacher effectiveness skills. Instruction is based on research-based teaching for student skill development. The *personal* orientation is a more humanistic approach where the teacher and learner are considered as people first; teaching, learning, and content are secondary concerns. Individualization, nurturing personal meaning, and growth are hallmarks of this approach to teacher education. In
the critical/social orientation, the relationship between schools and the structure of society becomes central. Attention is drawn to the moral obligations of teachers to include all members of society, regardless of age, gender, race, religion, skill level, or socioeconomic level.

Michael Metzler and Bonnie Tjeerdsma (2000) suggest that teacher educators have a responsibility to assess the effectiveness of what they do, with whatever model or conceptual orientation is selected. They suggest that few teacher educators have spent much effort doing this type of assessment. In an effort to be of assistance, Metzler and Tjeerdsma provide a variety of tools for assessing and improving program delivery.

Daryl Siedentop and Larry Locke provided an alternative perspective on assessing PETE programs in 1997. They describe the minimum conditions necessary for the effective operation of a PETE program, and also suggest that the responsibility of PETE programs goes beyond educating new recruits and includes a duty to "create and sustain good school programs" (p. 27). These authors go on to lament that few PETE faculty have assumed any responsibility for the quality of programs in schools, instead adopting an "us" (e.g., faculty in higher education) versus "them" (e.g., teachers in the K–12 schools) mentality. The outcome of this adversarial relationship has been a declining level of competent program delivery, with national health-related consequences. In 1990 John Goodlad identified a similar concern when he suggested that the reform or renewal of schools, teachers, and teacher preparation programs has to occur simultaneously.

In-Service and Staff Development

Most states require some sort of ongoing accumulation of continuing education credits for teachers to retain their licensure. Most school districts create opportunities for continuing education related to topics relevant to the purposes of schools and needs of students in their community. Unfortunately, these opportunities are often too generic to address the specific needs of physical educators, and are often perceived to be ineffective.

Beyond state and school district requirements, there is a key challenge for licensure programs: convincing graduates that their preparation to become true professionals has not ended, but has just begun. Without an internal commitment to ongoing professional growth, few in-service or staff development efforts are effective at eliciting change. Indeed, although specific examples of successful change efforts can be cited, Linda Bain (1990) describes practice in physical education as "generally resistant to change" (p. 771).

Michael Eraut (1987) describes four approaches to in-service education that can be used to categorize some of the work in physical education. The defect approach involves behavioral training to build skills that teachers lack. In physical education, targets of this approach have included different verbal behaviors (e.g., feedback, prompts, questions, use of student names, etc.), teacher movement, task selection, and others. The growth approach is about helping teachers seek greater fulfillment, rather than helping them simply become competent. In physical education, this approach is difficult to distinguish from the problem-solving approach, where efforts are made to help teachers diagnose problems in their own
instructional setting. Program research from places like Teachers College at Columbia University and the University of Massachusetts would be examples of this kind of in-service program. Lastly, the change paradigm involves efforts to make changes in programs that are responsive to greater societal needs. Attention to gender equity, mainstreaming, and nondiscrimination would be examples of this work in physical education.

Trends and Controversies

The most critical concern facing physical educators in the United States is the viability of physical education programs as a required subject in schools. As opportunities for advanced placement courses; electives in art, music, and foreign languages; and other varied courses have occurred, time in the required curriculum for physical education has declined. There are consequences to this on at least two levels. First, the health of the nation is at risk when the most equitable delivery system for ensuring active lifestyles is curtailed. Second, there is a declining need for teacher education programs when there are fewer teaching positions available for program graduates.

Related to the time available for physical education programs in schools is an ongoing debate over the most appropriate content for programs. In some states (e.g., West Virginia and Florida) there is a major emphasis on student performance on fitness tests as an indication of physical education program effectiveness. In other states (e.g., Missouri) there is more of an emphasis on the demonstration of written competence in health-related fitness knowledge. In at least one other approach (South Carolina), there is an attempt to hold teachers accountable for fitness levels and fitness knowledge, as well as out-of-class behaviors and movement competence. There are obvious implications for teacher preparation programs in each of these states with respect to what will be expected of program graduates. It is also worth noting that none of these approaches is an exact match with NASPE guidelines.

Part of the debate over appropriate content for teacher preparation can be traced back to a classic 1964 work by Franklin Henry, where physical education was first conceptualized as an academic discipline in the United States. For the first time, the study of human movement spawned viable areas of study, leading to degrees and careers other than teaching. Today, locating departments of physical education in colleges and universities is a challenge, partly because such departments can go by so many different names: 114 have been counted by P. Stanley Brassie and Jack Razor, including Biomechanics, Kinesiological Studies, Kinesiology, Sport Science, and Sport Studies, to cite just a few. Approximately half of these departments are in colleges of education, while others are in colleges of liberal arts, applied sciences, health, or elsewhere. This identity crisis has lead to marginal status for physical educators at all levels.

A common trend in teacher preparation programs is for early and frequent field-based experiences for students. The challenge is to find (or create) placements where desirable practices are being modeled. An additional challenge is to determine the amount and type of training required to prepare school-based supervisors.

The last major controversy that warrants mention in teacher preparation involves determining the most appropriate level for initial licensure. In some
institutions (e.g., the Ohio State University), initial licensure in physical education is only available at the graduate level. In other schools (e.g., University of South Carolina), initial licensure is available at both the undergraduate and graduate level. In most of the rest of the country, initial licensure is predominantly delivered at the undergraduate level. There is no definitive evidence on which (if any) of these approaches is the most appropriate way to prepare physical education teachers.

**Conclusions.** The analysis of the system of PE teacher preparation in the US showed that there is much in common in approaches to graduate education with those in Russia, however special emphasis is given to In-Service and Staff Development, continuing education and licensure programs. In the US there is an attempt to hold teachers accountable for fitness levels and fitness knowledge, as well as out-of-class behaviors and movement competence. There is understanding that the health of the nation is at risk when the most equitable delivery system for ensuring active lifestyles is curtailed. That’s why much should be done to train high level professionals in PE who could meet the challenge.

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http://education.stateuniversity.com/pages/2324/Physical-Education.html
Problems of socialization of growing up generation always have been in the focus of attention of any society. Family and preschool provide children’s initial socialization. Then he socializes is school. And finally, when he grows up, he socializes in institution of higher education. During the socialization process he masters team communication skills, gains knowledge, becomes a useful member of society. There had been another socialization stage during the Soviet era: when the young specialist got a job, he, as a graduating student, had been supervised by his mentor for two years to adapt him to the real working conditions. In sports this stage started even earlier and much more attention were paid, because coach took sportsman under patronage from his youth and had worked with him for a few hours every day. The process of adaptation of the young specialist were started to vanish after the introduction of the private property institution is Russia and launch of a huge amount of private companies. All of the private companies want to hire a well prepared specialist with initial practical experience. Thereby we don’t have any dedicated system of young people socialization today. However, such socialization is carried out individually by the youth itself. For example, it happens when people combine work and education during the later years of study in university. But often such labor activity is poorly connected to the educational process.

So it seems to be rational to develop the system of higher grade student’s socialization to labor activity based on the institutes of higher education. It will allow to graduate specialists in Russian educational organizations, who will be well prepared to their actual area or labor activity. Herewith, they will be able to work in the spheres they chose as a specialization in university. On the other hand, in this case employer will get a well prepared specialist, who can immediately start their professional labor activity.

It seems that such system of labor socialization is possible to develop on the basis of student’s practical training. Therefore, during the studying of baccalaureate program, student’s practical training has to be extended to fit one term, for example, first term of the fourth grade. At the same time, length of the everyday student’s practice should be extended to the length of the working day in the organization this practice takes place. But the summary amount of theoretical knowledge is taught to students should stay the same at the expense of increased student’s workload during the third year of study. The same half a year length practice under the same conditions can be organized to the magistracy students.

Introduction of such a socialization system will allow, on the one hand, the educational organizations to graduate specialists, who are professionally well prepared to labor activity, and on the other hand, it will partially solve the problem with the lack of human resources in the big cities.
THE INFLUENCE OF ORIENTAL MARTIAL ARTS ON THE FORMATION OF RESISTANCE TO HARMFUL HABITS AND DRUG ADDICTION

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Introduction: The urgency of questions of preventing modern Russian teenagers from taking up destructive substance is obvious. The number of crimes committed under the influence of drugs has increased significantly for the last ten years.

As the medical treatment of the formed physiological and psychological drug addiction is rather ineffective (according to the World Health Organization, only 5% of patients have steady remission), the increase of efficiency and broad introduction of the methods of initial prevention from taking drugs and other destructive substance turned to be the most pressing problem nowadays. As far as more than 80% of drug-addicts become familiar with this substance being teenagers, the main effort should be aimed at the preventing measures in this age group.

Existing conditions show us the necessity of searching for the ways of opposition to drug addiction among teenagers considering the use of physical education and sport that satisfy the needs of a developing personality and provide its successful socialization. It is mentioned in the works of P.Vinogradov, A.Dushanin, L.Lybisheva and others that sport has many possibilities for influencing people’s physical and mental abilities and their relations as well. In our opinion, the influence of practicing different sports on developing the negative attitude towards taking drugs could be of great interest for researchers. Under the “attitude” it is understood the stable system of person’s views at the definite sides of the reality expressed in his/her behavior and actions.

In several investigations (B.Binder, L.Avdonina, T.Lysikova) it is underlined that the practice of Oriental Martial Arts encourages the attainment of the high mental state together with physical and intellectual perfection. According to these and other authors, the ideal of Oriental Martial Arts practice is the improvement of self-organization, self-control, the development of peacefulness and high moral qualities, submission of body to conscience and will. The detailed characteristic of Martial Arts lets us consider them to be a possible tool of developing the negative attitude to taking drugs.

Methods: The research was carried out at the “Sport School “The Centre of Oriental Martial Arts”, which is located in Cherepovets. Teenagers (from 12 to 17) took part in our research. All of them practice Martial Arts in different groups (karate, kudo, aikido and kobudo) (n=17). The correlation analysis has been taken within the scope of the pilot experiment in order to reveal the connection between the experience in Martial Arts and the behaviour connected with the risk of drug addiction. Psycho-diagnostic methods (the author – A.Greckov) were taken as diagnostic instruments. They were presented as the computer program “”TT” which was designed for automatic processing and storing the results of the test and constant
collection of statistic data. Four tests were included in the plan of our research. They identified the type of temperament, the rate of independence, protective mechanisms of a personality and the way of solving everyday problems.

Results: With the help of the test it has been revealed that the types of temperament are different but the most of sportsmen are sanguine people (kudo – 5 phlegmatic and 4 sanguine people, aikido – 1 choleric person and 1 sanguine person, kobudo – 1 phlegmatic person and 1 phlegmatic/sanguine person).

As for the results of the second test, it has been ascertained that the most part of the respondents are rather independent but they are attentive and respectful to other opinion. Besides we haven’t found absolutely dependent and irresolute people among those under the test.

The situation when it’s impossible to reveal the predominant protective mechanism is considered to be the most favorable result of the method “Protective mechanisms of a personality”. In this case, in different situations different mechanisms are preferable. Our research has shown the predominance of positive marks of respondents’ protective mechanisms.

According to the results, all sportsmen are solving their everyday problems in a positive way.

All the results of the tests #1,2,3 and 4 were represented as points in order to count Spearman’s rank correlation between the results of the tests and the experience in Martial Arts.

Discussion: Thus, the results of the test “Rate of independence” show us that the character building with the help of Martial Arts is directly connected with the opposition of teenagers to harmful habits including drug addiction. Martial Arts create the tendency to develop such traits of character as independence, self-reliance, resistance to outside influence and respect to other opinion. The personality of their instructor influences greatly. They call him “sensei” and should obey him without demur. The personalities of their teammates and their adversaries whom they should respect are also very influential.

The results of the test “Protective mechanisms of a personality” have revealed that the peculiarities of Martial Arts, the necessity of making their own decisions on the “tatami” have helped sportsmen to develop different protective mechanisms. Those teenagers who practice Martial Arts have got a possibility of making rational well-considered decisions in difficult situations for a short period of time. It also makes them resistant to harmful habits and drug addiction.

The positive results of the test “Ways of solving everyday problems” demonstrate us that practicing these kinds of sport and a rush of adrenaline during a sparring, teach the teenagers’ organisms to combine rationally the rest with physical training, to find the ways out from difficult situations and solve positively their problems. Having such skills, teenagers needn’t take drugs in order to solve their everyday problems.

At the same time the coefficient of rank correlation between the results of the test and the experience (as a period of time) reveals the lack of the reliable connection between them according to all three tests (Rs=0,064 with p>0,05; Rs=0,295 with p>0,05 и Rs=0,228 with p>0,05).
Conclusion and summary: All over the world sport is an accepted form of anti-drugs measures and nowadays many people consider it to be the panacea. Thus, the potential of Oriental Martial Arts as a tool for decreasing the risks doesn’t work automatically. Obviously, some purposeful actions of the instructor are necessary as well as the creation of particular conditions for up-bringing the position of negative attitude towards drug addiction. The following stage of our research will be aimed at the search for such conditions and making the grounds.

Problem topicality
The initiatives of the Russian Government aimed at the development of high professional education (HPE) and primary professional education (PPE) have become noticeable recently. The Ministry of Education and Science of the Russian Federation has determined the following key tasks of the professional education:
- To improve content and education technologies;
- To develop the system of providing educational services quality;
- To raise management efficiency and improve economical mechanisms in the sphere of education;
- To raise workability of workforce.

Research goal. To work out and estimate the efficiency of the Physical education programme by the means of additional education in martial arts, athletic gymnastics and handball and reveal the most efficient one.

Research Object. Students of building and technical specialities in vocational school №17.

Research Subject. Influence of methods and means of martial arts, athletic gymnastics and handball upon the increasing of workability level of the students studying in the real production regime.

Practical Significance. The work is closely connected with the preparation of the recommendations on the efficient instruction system of HPE and PPE students in building and technical specialities.

COMPLEX REGIONAL INITIATIVES (PROJECTS)
Modernization of Moscow professional education system
At present the Ministry of Education and Science of Kaluga Region is carrying out modern educational technologies, introducing the principles of creation of multilayer professional preparation of specialists.
1. Transition of educational establishments into autonomous form that have more independence in setting educational trajectory of students and financial and economic activities.
2. Optimization and development of professional education system net (in primary, secondary and higher education) for providing high population quality
of life and steady region development.

3. Primary and secondary professional education system modernization to solve innovative tasks in interaction with employers.

实施的departmental target programme “Primary and Secondary Professional Education System Development for the period of 2010-2012”

Within the scope of realization of modernizing process in the system of professional education in the regions of the Russian Federation the Ministry of Education and Science adopted and is realizing Departmental target programme “Primary and Secondary Professional Education System Development for the period of 2010-2012”.

The aim of the programme is to prepare professional personnel claimed by Moskow region economy through realizing the following tasks:

- Accomplishment of actions aimed at raising of correspondence of professional personnel preparation system and region needs;
- Broadening of partnership between educational establishments and employers in the preparation of future specialists;
- Raising of qualification level of administration and engineering and pedagogical staff of primary and secondary professional education establishments;
- Popularization of primary and secondary professional education professions and specialities;
- Improving of educational work in the system of primary and secondary professional education.

Conclusions

Modern trends of the PPE and HPE system development in the education and PE dictate new conditions for functioning and application of pedagogical processes management methods including those on the basis of pedagogical logistics (PL).

The conception of PL derives from English “educational logistics”. In general, two interconnected directions are distinguished both in Russian and foreign research. One of them points out at some qualitative indices of pedagogical activity, the other focuses on organizational and management mechanisms that are successfully realized in business.

When specifying the term we come to the conclusion that in PE one should realize general system and organizational and management mechanism of the pedagogical activity formation acting on the basis of advisable distribution of material and non-material resources of the quality renovated educational system.

The application of organizational and management PL methods allows to increase the efficiency of using material resources and create health protecting infrastructure within the frames of educational establishment of secondary professional education as well as beyond it.

Making the conclusion I should first of all mark the barest necessity of preparation and realization of secondary professional education establishments
initiatives in the development of PL in the complex organization of the process of PE, additional education and instruction in whole basing upon Russian and foreign experience.

The realization of this approach might let not only achieve a new level of the PE process organization in the secondary professional education establishments but will also benefit the quality of professional education and instruction which will fulfill the tasks set by the Government.
Section III
Medical and biological aspects of physical education and sports
COMPARATIVE ANALYSIS OF MORPHOFUNCTIONAL FEATURES OF ATHLETES SPECIALIZING IN SPEED SKATING AND SHORT-TRACK

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Modern level of sport achievements in speed skating and short-track sports is extremely high and not every sportsman can reach the highest results, but only those who possess an appointed complex consisting of technical qualification, will to win, effective combination of genetic background and morphofunctional features. Scientific researches by Dorokhov R. N, Nikitjuk B. A. [8, 4] show existence of accurate distinctions in the total dimensions, body proportions, constitutional features at representatives of various sports. The work purpose is researching and comparing variability of sportsmen individual morphofunctional measures who engaged in speed skating and short-track sports. Anthropometric data of sportsmen from 10 till 30 years old, specializing in speed skating and short-track sports in Moscow and Kolomna are the objects of research. Such morphological signs, as long-length, latitudinal and circumference sizes, and also their changes in process of speed skating and short-track will be studied. The morphofunctional features of structure peculiar to skaters were studied by A.A.Gladysheva [2]. It has been shown that the longitudinal sizes of a body essentially don't differ: with improvement of professional skill the width of shoulders and cross-section diameter of a breast increases; the cross-section sizes distal epiphysis from the category to the category change a little. With improvement of professional skill grasps of a breast, a shoulder, a forearm, a hip and a shin are increase [2]. For skaters it is characteristic lowered adipopexis, narrow shoulders, small stoop and long feet. It is established that more long a foot, then more for a long time a phase of a sliding step. For the qualified skaters primary development of force of muscles – hips and shins extensors is necessary. It is connected by that these muscles perform the basic work [3]. The pose of the skater is characterized by a sharp inclination of a trunk and bending of feet in coxofemoral and knee joints, its preservation demands the big static endurance extensor muscles of a trunk and feet [3,1]. According to O.M.Motuzka and Kajkan S.M. , there is no dependence of sports result from age and height - weight indicators in skating sports of higher achievements [7]. However at comparison of morphological indicators of skaters of different qualification on 500 meter distances it has been revealed by L.L. Golovina that sportsmen of high qualification surpass the others in height [3]. Leaning against results of the comparative analysis of statistical parameters of surveyed morphological indicators at skaters (weight, length of a body and length of a foot), E.G.Martirosov and G.S.Tumananj come to a conclusion that they don't render influence at highly skilled sportsmen on productivity of run on 500 meters, and as for the length and frequency of steps [6]. Outwardly the short-track as a kind of sport is very similar to speed skating: the same landing, the similar skates, and the similar technique of run. Considerable loadings concern features of skating technique in a short-track on overcoming of centrifugal force, a deep inclination of a body of the sportsman in run on turn, very low landing, pushing away by both feet is made
precisely aside [9]. In a short-track the person with indicators of length of a body below an average achieve high results. It speaks smaller action on the sportsman of centrifugal force and primary display at undersized people of high-speed and power abilities that answers with the sport requirement. Besides, at sportsmen engaged the short-track, marks prevalence of length of a hip over length of a shin [5]. Scientific novelty of planned work consists in the fact that previous morphofunctional researches of skaters were conducted in Gladysheva A.A., Dorokhov R. N, Nikitjuk B. A. works in 1970’s, 1980’s, and 1990’ years of the last century.

However for the last years there were essential changes in the relation of skating technique: on change to the old skates with a long edge and fastening in two points, in the middle 1990-s the new revolutionary skates have entered into use – clap skates or slap skates which cardinaly differ from traditional and essentially improve result. Such innovation, to our opinion, shows the new, yet not studied requirements to morphofunctional characteristics of sportsmen. In modern scientific literature morphofunctional characteristics of sportsmen engaged in short-track sports practically is not studied. Results of trainer's poll show that many trainers use technique of skaters training for preparation of characteristics of sportsmen engaged in a short-track. Planned comparative research will help to reveal, how much effective are these methods of preparation taking into account features of sportsmen structure and to define degree of distinction and their similarity of morphofunctional indicators.

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FITNESS TEST AS AN IMPORTANT COMPONENT OF FITNESS CLUB SERVICE

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Introduction

The aim of this study was to determine the place in the spectrum of services to the fitness club class "Lux" and "Premium" service medical fitness club, and, in particular, the fitness test.

Methods

Analysis of questionnaires fitness test (sample 3000 forms, of which 1800 women and 1200 men between the ages of 9 and 73, the statistical report for 5000 at the suggestion of customers visit on a fitness test for the period January 2009 to September 2011.

Results

From 5000, invited to a fitness test before the training in a fitness club, to come to a fitness test decided 3,000, of whom 1,800 women and 1,200 men. Moreover, 1,000 of them (400 women and 600 men) came to a fitness test after repeated invitations. Of the 5000 respondents said that their decision to start training influenced the invitation to the fitness test to the doctor of the club. From the group of customers who have a short (less than 1 year), the validity period (1,300 people, including 800 women and 500 men), the fitness test were 90% of club members during the first month of the club card, 10% - to postpone his visit to a fitness test on the last days of a club card. Of the group of clients (1,700 people, including 1,000 men and 700 women) with a long term validity of the card (one year or more) fitness test during the first month of the card were 900 men and 500 women. Of the total of the last fitness test, it was revealed the following. Before the fitness test of 3000, passed a fitness test, 2300, 1447 men and 853 women believed that their fitness is enough personal physician advice (medical facility) and or a personal trainer. In this case, of which 1687 (1267 men and 420 women) had recommendations for sports overall plan in relation to one disease. From this group of customers of the club 826 people were unable to formulate a diagnosis without the aid of personal physician, 127 people considered themselves to be sicker than were actually. 534 people (321 men and 213 women) did not inform the personal physician of their plans to do fitness, and because when dealing with a doctor, they did not mention fitness, they believed that a personal physician would not oppose the workout in the fitness club. In 758 of the client group of the club who were tested, (328 men and 430 women) during the fitness test, identified the need to limit loads for self-training. In 189 cases it was suggested to postpone the session until the end of the examination or treatment and in 13 cases, excluding training (due to the presence of contraindications). The group tested the same way it was revealed that before the fitness test, the need for any restriction in the classes thought to 2,500 people in the fitness test is explained to them the amount of allowable loads. Of 3000, passed a fitness test: 2401 clients, 1458 women and 943 men wanted to take advantage of additional services provided by a
physician fitness. 2004 people would be willing to take the test again. 2725 people thought the information obtained during the fitness test required. 1789 people have changed their idea of training in a fitness club. Total medical attention outside of emergencies, not counting the initial fitness test, it was 2975 visits in the entire sample of 5,000 people.

**Discussion**

These results indicate that the fitness club, not a medical institution is inherently

By purchasing a club card, the person feels healthy or hopes to gain health. With the development of fitness industry, purchase a club card is available all over the general population. Features of Health suggests a minor contribution to screening healthy people willing to subject themselves to regular exercise. Priority is given to patients and to make decisions about appropriate diagnostic search, or treatment. In addition, the low level of education of the population, in terms of health, on the one hand, a large amount of information on the Internet and the media and training aids for training, on the other hand, allow you to physically active individuals believe that they are able to without a doctor solve the problem of choosing the type of exercise. It is not always the personal physician is a physician specialized physical therapy and sports medicine. Recommendations made in these situations may be too restrictive. It is not always the coach can be a doctor by training, to make the right choices in the types of allowable loads, taking into account all the characteristics of the organism client fitness club. In addition, in some situations of any health problems or the results of plastic surgery client is not ready to talk with people without medical education. Just wanted to point out that doctor fitness club is in a market fitness services, "a kind of protector" of the client, while preserving the fitness club consumers from errors when using a wide range of services fitness club. In some situations, a physician fitness club is a link to a fitness club team, helping customers to realize the physical and psychological readiness for certain types of loads in the health club.

**Conclusion**

Fitness testing at a health club, held a physician, it is necessary for optimal selection of loads for customers of fitness clubs. This service helps to optimize the performance of all parts of the team fitness club.

Conclusions: Fitness testing in terms of fitness clubs "Lux" and "Premium" is necessary for most clients a comfortable stay at a health club, which helps to address the fight against physical inactivity and its consequences. 2. Fitness testing clients fitness clubs promotes screening of diseases that require restrictions on access to loads in individuals, or the expansion of access to loads of other categories, and b) helps customers adapt to the club's proposed services.


COMPREHENSIVE REHABILITATION OF CIRCUS PERFORMERS WITH FIBROMYALGIA LUMBOSACRAL SPINE

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Introduction
Fibromyalgia (FMA) is a common form of pathology - 2-6%. The experience of our professional work in the circus, and a number of literary sources indicate the presence of this pathology among the circus performers, in particular, acrobats and gymnasts, due to injury and stressful situations in their work.

The absence of a comprehensive approach to treatment of this pathology with the use of pharmacological, psychotherapeutic, and physical rehabilitation aids lead to worsening of the disease. According to some authors, none of the known methods of rehabilitation today allow to achieve a stable therapeutic effect. In this regard, it is advisable to develop a program of combined application of various means of physical and psychological rehabilitation of circus performers to recover their ability to work.

The purpose of the research is to develop an effective complex program of comprehensive rehabilitation with fibromyalgia lumbosacral spine. According to the purpose, the following goals were set:
1. To study the literature on this issue.
2. To study the clinical and functional characteristics and psycho-emotional condition of patients with fibromyalgia of lumbosacral spine.
3. To develop a program of complex rehabilitation of circus performers in the subacute stage of the disease.
4. To determine the effectiveness of the developed program in the pedagogical experiment.

In our research we used the following methods:
1. Palpation examination of fibromialgical points.
2. Anthropometric method for the study of motion in the lumbosacral spine.
3. X-rays of the lumbosacral spine.
4. Magnetic resonance imaging (MRI).
5. Psychological testing and questionnaires.

Organization of the research. In our research involved 20 circus performers (men and women), 19-36 years old. Among 20 patients, there were 10 identified in KG and 10 - in EG.

Circus performers differ very much from athletes in their physiology. Therefore, the rehabilitation is conducted with the selection of a special set of exercises and other rehabilitation methods, such as massage, physiotherapy, psychological adjustment and the elements of manual therapy.
The main goal of rehabilitation in fibromyalgia is a fast restoration of optimal motor stereotype and quality of life. From which the following tasks are:

- reduction of pain;
- relaxation of muscle spasm in the affected area;
- inactivation of tender points (TP);
- correction of vertebral deformities reflex;
- stimulation of blood and lymph circulation in the affected zone spine.
- elimination of patobiomehanichal changes of the spine.

The complex of physical rehabilitation includes:

- morning hygienic gymnastics
- health gymnastics
- special exercises from the starting position lying on his stomach, back, sitting down
- exercises aimed at stretching the spine
- special exercises for autorelaxation of the long back muscles, lower back muscles of a square, deep paravertebral muscles.
- isometric exercises.
- post isometric relaxation technique.
- exercises to strengthen paraverterbal muscles and increase mobility of the affected spine.

Discussion of research results.
Indicators of research in the EG were much higher than in controls. The results of pedagogical experiment suggests that we have developed a program of psycho-physical rehabilitation which is more effective to restore the circus performers with FMA syndrome of the lumbosacral spine. Based on a new combination of exercise and psychological treatment, it allows:

- to improve the condition of the neuromuscular system of the affected spine;
- to improve the psycho-emotional condition of the patient;
- to reduce the pain.

That will contribute to the fast restoration of optimal motor stereotype and improve the quality of life.

Conclusions.
1. Analysis of the literature showed that in the available literature we found no comprehensive rehabilitation on the issue.
2. During the experiment it was found that individuals with FMA following pathological changes:

- have at least 11 tender points out of 18 possible points (according to the American College of Rheumatology)
- myofascial hypertonicity
- damage the retaining structure of the lumbar spine.
- Violation of the optimal motor stereotype.

Deviations were found in the psycho-emotional sphere:

- depressed mood
• lowering the general tone and feeling
• fatigue and reduced physical activity.

3. A comprehensive rehabilitation program includes the most effective methods and means of exposure for patients with fibromyalgia lumbosacral spine in the subacute stage.

4. The results of research and pedagogical experiment conducted by us showed that the developed program of psycho-physical rehabilitation in the subacute stage shows significant (p <0.05) improvement in all indicators: increased range of motion of the spine parameters, all rates and increased joint mobility were significantly higher, for all indicators (health, activity and mood), statistical differences between the EG and the CG was a positive trend. It allows you to improve the neuro-muscular system of the affected spine, to improve the psycho-emotional condition of the patient, to reduce pain. Listed above contributed to the fast restoration of optimal motor stereotype, returning to the profession and improving the quality of life.

Thus, our developed program of comprehensive rehabilitation may be recommended for the restoration of circus performers (acrobats, gymnasts and performers of the genre "contortion") with fibromyalgia lumbosacral spine.
HEALTH IMPROVING TECHNOLOGIES IN PHYSICAL EDUCATION
STUDENTS OF HUMANITIES

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Modern State student physical fitness testing includes 100 and 1000 m running or resembling distances running, long jump test, push-ups, pull-ups, stand-and-reach test. Such test choice is based on physical person’s quality approach. Flexibility, endurance, strength, speed, agility, coordination, balances etc. These qualities were determined by factor analyze wide populated in 1960-80.

Reasoning about physical abilities doesn’t tie with inside human composition. If maximal running exercises are used for people without regular training it can lead to adaptation derangement, locomotive system and myocardium overstrain, psychologically negative experiences. Unfortunately cases when the serious trauma or even death was result of such testing are known! And the probability of similar cases increases, in connection with decrease in physical activity and, as consequence, readiness in a modern society.

We see two ways to counteract for the current situation:
1) To popularize the health improving physical training (fitness training);
2) To change the fitness testing programs that will promote in turn to the health improving physical training.

Hypotheses. Modern students of Humanities have the low physical capacity level. The traditional fitness testing technique can be used only for regularly training and without contra-indications students. For irregularly training students and students of special medical groups we recommend using other programs including safe traditional pedagogical and laboratory tests. And 100 and 1000 m results can be predicted by equations. The greatest improving effect at limited time for physical training lessons give rationally organized power and strength exercises.

Investigation methods. Literature analysis, anthropometry, biking ergometer, breathing, heart rate measurements, fitness testing and experiment, mathematical statistics and analysis.

Results of Research. Laboratory and fitness testing (about 70 indicators) has been held for definition student’s body development and readiness. About 3000 students of Modern University of Humanities (MUH, Moscow) have been taken in testing. As we supposed humanities student’s fitness level corresponds non-trained people and is authentically lower in comparison with students of the previous generations. The same facts are shown in students’ body composition parameters. Modern students are authentically higher but have big fatty and less muscular weight.

Using class, correlation, factorial, regression analyses we have deduced forecast equations for 100 and 1000 m running results. In total we developed more than the 160 equations. Here we will show example of the most forecast equations with the account of independent parameters (the entire equations are authentic at p<0.001) 1000 m, men

1. VO2 (Vat/kg). \( T=355-36\times VO2; \) \( R=0.91, \delta=11.6 \) seconds.
2. One step jump (J, cm). \( T = 428 - 0.87 \times J \); R=0.86, \( \sigma = 15 \) s.
3. The Ruffle’s index (RI). \( T = 175.6 + 6.2 \times RI \); R=0.9, \( \sigma = 13 \) s.
4. VO2, hip skin fatty fold (mm, HSF), push-ups (P).
\[ T = 374 - 35.3 \times VO2 - 1.4 \times P + 1.7 \times HSF; \] R=0.97, \( \sigma = 8.1 \) s 100 m, men.
1. One step jump (cm). \( T = 24.7 - 0.047 \times J \); R=0.96, \( \sigma = 0.37 \) s.
2. One step jump and shoulder in pressure girth (SPG, cm).
\[ T = 26.6 - 0.046 \times J - 0.006 \times SPG; \] R=0.97, \( \sigma = 0.35 \) s.
3. VO2 (Vat/kg). \( T = 20.7 - 1.9 \times VO2 \); R=0.83, \( \sigma = 0.77 \) s.

See more in “Сравнительный анализ инновационных технологий физической подготовки студентов гуманитарных вузов на основе мониторинга физического развития” V. Feofilaktov dissertation.

In addition to traditional program we have developed and approved an individual testing technique of physical students’ readiness without use challenging 100 and 1000 m running tests. The technique gives opportunity to safe exact measurement of physical qualities and basic body systems’ condition.

The testing is carried out on the basis: 3 traditional fitness tests (one step jump, push-ups or pull-ups, stand and reach), physiological tests (VO2 bike ergometer, pulse pressure, volume of lungs, heart rate), anthropometries (skin fat folds, fat and muscles percent). If it is necessary testing results can be led to State standard program.

Also we have developed and approved a fast testing technique for students’ body performance and readiness (the group testing technique). The measurements are carried out with anthropometry and pulsemetry. It is estimated: 1) constitution density including taking into account weight of fat and skeleton; 2) physical arms and legs development; 3) cardio-vascular condition (pulse pressure). Using group technique indicators it is possible to estimate the traditional fitness indictors taking into account a constitution.

The liberal art students’ pedagogical experiment has been made for check the sport lessons efficiency and developed individual and group testing technique. The experiment was spent at the Modern university of humanities physical training department within 3 months. Four groups had been generated from 53 MUH students. The first – control group-1 (14 young men), the second – control group-2 (14 girls), the third – experimental group-1 (13 girls), the fourth – experimental group-2 (12 girls). Students of all groups practiced 1-2 times per week. The control group’s students were engaged in physical training by the traditional approach. The experimental group-1 was trained by “Aerobics” approach and experimental group-2 by ‘Isotone” approach.

The experiment results. By an individual technique in control groups the estimation gain was made: -0.5\( \pm 0.5 \) a point (men) и.0.0\( \pm 0.5 \) a point (girls), and in experimental groups 1.7\( \pm 0.9 \) a point (Aerobics) and 1.5\( \pm 0.4 \) a point (Isotone). The Rating scales are the 10 ball.

By the group testing technique the body development estimation became better in all four groups. The experimental groups had: “Aerobics” 0.7\( \pm 2.3 \) (p>0.05) points and “Isotone” 1.1\( \pm 1.1 \)(p>0.05). The control groups had 0.1\( \pm 1.7 \) (p>0.05, men), 1.5\( \pm 1.7 \) (p<0.05, girls)
The conclusion. Efficiency of the health improving technologies is confirmed in students’ of humanities physical training. Possibility of using is shown for the developed safe individual and fast testing technique. It is received authentic (p<0.05) improvement of physical fitness at experimental groups students at the minimum time for training (1,5-2 hours per week) for three months of employment.

The most fitness effects for students’ of Humanities limited sport lessons give rationally organized power and strength exercises. Aerobics one practice VO2 gain is 1.5 %, 2.42 in grade and Isotone one practice VO2 gain is 1.75 %, 2.3 % in grade.

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THE INFLUENCE OF SLEEP ON SPORTS’ PERFORMANCE

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It’s so easy to say sleep is crucial in the restorative process. But how much sleep do athletes really need?

As the levels of physical and mental stress increase so does the amount of sleep we need. However, sleep seems to be the first thing to suffer with athletes needing to combine training with study and/or work. Late nights followed by poor quality sleep and early starts will clearly hurt training quality.

Sleep can impact performance in three main ways:
1. Lost sleep reduces the performance of the cerebral cortex in the frontal lobe of the brain which is responsible for the most important mental functions in sport—focus, concentration, flexibility, decision making and information processing.
2. The very deep or Rapid Eye Movement (REM) sleep helps consolidate activities, tasks and skills undertaken that day. It is indispensable for helping motor learning and skill acquisition.
3. Sleep is a significant stimulator of growth hormone release - the body’s natural agent for cell growth and reproduction. In addition to acting to increase muscle mass, growth hormone also stimulates the immune system. Sleep deprivation raises levels of the stress hormone Cortisol which may interfere with tissue repair and growth.

How Much Sleep Do You Need?
Research shows that as little as 20 hours of sleep deprivation can have a negative impact on sports performance, particularly for power and skill sports.
Sleep experts recommend seven to nine hours of daily sleep for adults, and nine to ten hours for adolescents and teens. You can estimate your own needs by experimenting over a few weeks. If you fall asleep within 20 minutes of going to bed and wake up without an alarm, you are probably getting the right amount of sleep. If you fall asleep immediately upon hitting the pillow and always need an alarm to wake up, you are probably sleep deprived.

How much sleep athletes need?
Many would say as much as possible! However, we don’t all have that luxury.
It’s worthwhile taking note of an ongoing study which suggests that athletes who get an extra amount of sleep are more likely to have better performance, mood, and alertness.
These findings spring from an albeit small investigation involving five students on the Stanford University men’s and women’s swimming teams.
The participants maintained their usual sleep-wake pattern for the first two weeks of the study, and then extended their sleep to 10 hours per day for six to seven weeks.

With extra sleep the athletes swam a 15-meter meter sprint 0.51s faster, reacted 0.15s quicker off the blocks, improved turn time by 0.10s, and increased kick strokes by 5.0 kicks.

**Why More Sleep May Improve Sports Performance**

Researchers speculate that deep sleep helps improve athletic performance because this is the time when growth hormone is released. Growth hormone stimulates muscle growth and repair, bone building and fat burning, and helps athletes recover. Studies show that sleep deprivation slows the release of growth hormone. Sleep is also necessary for learning a new skill, so this phase of sleep may be critical for some athletes.

7 Tips to Improve the Quality of Your Sleep:

1. Have a regular wake up time and go to bed time each day. It’s best to follow this pattern through weekends too, so as to reduce disruption to your body clock.
2. Avoid coffee, alcohol and other stimulants prior to heading to bed. Aim to reduce stimulant intake after 4-6 pm.
3. Try to avoid high intensity exercise and large meals after 7:30pm (assuming bed time of 10pm).
4. Create quiet time before bed. The aim is to reduce stressors and stimulators to allow the mind time to wind down.
5. Your sleep environment is important so aim for a quiet dark bedroom with a cool temperature. Consider taking your own linen and pillow when traveling
6. Some say that if you are not asleep in 30 minutes then get out of bed, read or undertake another quiet activity and return to bed when drowsy. Try it and see if it works; otherwise, just lay there quietly and rest - you can’t force sleep but if you’re relaxed and peaceful you’ll rest nicely and likely go to sleep.
7. Do not nap within 1-3 hours of bed time. If you do nap in the day then aim for 20-40 minutes around lunch time.

**How to Use Sleep to Improve Sports Performance**

- Make sleep a priority in your training schedule.
- Increase your sleep time several weeks before a major competition.
  - Go to bed and wake up at the same times every day.
  - Take daily naps if you don't get enough sleep each night.

So, the findings led specialists to recommend athletes make sleep a part of the training program, aiming for 8+ hours most of the time. Also, athletes should extend nightly sleep for several weeks before competition to reduce sleep debt.

Maybe it’s time for coaches to consider slumber parties rather than 6 a.m. practices!

Source:


TRACK-AND-FIELD ATHLETES’ VEGETATIVE BALANCE AND PSYCHO-PHYSIOLOGICAL CHARACTERISTICS DURING PRE-START CONDITIONS

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Russian State University of Physical Education, Sport, Youth and Tourism. Moscow, Russia

Key words: pre-start conditions, track-and-field athletes, psycho-physiological characteristics.

Nowadays the sport result could be determined by many factors. Track-and-field athletes pre-start conditions such as: pre-start fever, readiness for action are of great importance. These characteristics influence on the results of athletes. (Our research is based on: Zimkin 1975, Thorevsky 2001, Kuzmin and Rumyanzev 2006, Zakhareva researches). Today track-and-field athletes’ bad pre-start conditions form bad result and it is a vital problem in modern sport. The aim of our research is to define this problem of pre-start conditions, investigate it and find the way to avoid it.

The aim of our research is to find the track-and-field athletes’ psycho-physiological and vegetative characteristics.

Methods: 19 track-and-field athletes aged 11-23, possessing the ranks from 1-st junior rank to Master of Sports rank. 1) We used mental capacity test (the computer test to find out the necessary symbol), 2) Simple activity reaction, 3) Tapping-test, 4) anxiety level test (questions), 5) stress-test, 6) individual minute (self counting from 1 to 60, in time of 60 seconds) to find the anxiety level of athletes, 7) dynamometry (using hand dynamometer to find muscle strength), 8) spirometry, 9) cardiac, prelum and pneusis rhythm, 10) biologically active points.

The results: We have divided our participants into 3 groups:
1) Advanced group (12 athletes),
2) Stable group (2 athletes),
3) Failed group (5 athletes).

The athletes in the 1-st group showed middle type of NS, middle and low level of anxiety. They showed the worst time during simple activity reaction (280 msec.). The lung capacity 3416ml. Whole energetic potential according to biologically active points had normal level or low level. The endocrine glands, butterfly adrenals, thyroid body, lymphatic system and respiration showed high level of excitation.

The second group showed the strong level of NS and low anxiety level. The simple activity reaction was better than in the 1-st group = 260 msec. According to the mental capacity test this group showed the best result. The lung capacity = 3679 ml. According to biologically active points the level was low. The respiration and hypothalamus showed excitation. The pituitary organ and thyroid body showed exhaustion.

The athletes of the 3-d group had weak type of NS and average anxiety level. According to simple activity reaction they showed the best result (247 msec.).
According to the mental capacity test they showed average result. The lung capacity = 3729 ml. According to biologically active points they had different result. Self-counting test from 1 to 60 (in 60 seconds) didn’t show the difference between these 3 groups.

We have found that track-and-field athletes had strong correlations between dynamometry and lung capacity ($r = 0,681$), breathing antiserum and biologically active points ($r = - 0,730$), simple activity reaction and biologically active points ($r = - 0,854$), lung capacity and biologically active points ($r = - 0,723$), individual minute and biologically active points ($r = 0,753$). According to our result we may say that weak type of NS which is combined with average anxiety level are bad factors to track-and-field athletes in pre-start conditions. Average anxiety level and high mental capacity level are good points in track-and-field athletes’ vegetative balance and psycho-physiological characteristics to show their best result in different periods of trainings.
MUSCLES MAGNETIC STIMULATION FOR INCREASING OF THEIR POWER POSSIBILITIES

Malkhasyan Eduard
Russian State University of Physical Education, Sport, Youth and Tourism, Moscow

Introduction
Currently, search of new methods allowing to raise physicality, improve functional condition and to maintain high working capacity of locomotor system of athletes is an actual problem of sports of the higher achievements. In 1985 A.T. Barker with coauthors has developed a new method of influence on nervous system and skeletal muscles of the person - "magnetic stimulation". Today magnetic stimulation of head and spinal cord, peripheral nerves and skeletal muscles has proved in Russia the high efficiency in diagnostics and treatment of neurologic diseases, neurosurgical monitoring, urology, rehabilitation. Preliminary researches in sports are also started.

The purpose of this study is to research the impact of magnetic stimulation on the power component of muscle activity of a high qualification sportsmen specialized in BMX-racing and track and field athletics.

Purposes
1. Preparation of regimens and parameters of the magnetic stimulation aimed at development of power possibilities of sportsmen musculoskeletal system.
2. Research of cumulative effect from influence of magnetic stimulation on muscles of sportsmen during some cycle of stimulation.

Methods:
Used equipment: magnetic stimulator Magstim Rapid (Magstim, UK), Inertial dynamometer "Biodex", telemetry 16-channel EMG ME-6000 (MegaWin, Finland), dinamografical platform ANTI.

The choice of the frequency of the influence of magnetic stimulation was defined from a spectrum of the electromyograms, which have been written down at examinees in background attempts for BMX-racing (Pic.1) and athletes (Pic.2). Muscular fibers of type IIa (FOG) were stimulated. The coil of the magnetic
stimulator was established on the quadriceps muscle of thigh. Muscle tension was performed in the isometric mode on the "Biodex". Duration of impact was 10 seconds. The subject performed 10 trials with breaks. During the ten-day period, magnetic stimulation was daily carried out.

Biomechanical testing of athletes was performed in a test “jump upwards from a place, hands on the waist” from dynamographical platform with the start angle of the knee 90°.

**Results**

There is a pronounced significant increase in the moments of forces for all subjects after stimulation cycle: for BMX-racing 20-90% (Pic.3 – histogram), for athletes 3-34% (Pic.4 – histogram). The rate of growth of the curve dynamometer increases to maximum power.

![Pic. 3](image)

**Pic. 3**

l.l. – left leg  
r.l. – right leg  
E-na, T-si, T-ch – testees.  
Interaction time increases with the support in a jump upwards, time of a flight phase after pushing away decreases.

**Table 1**

<table>
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<tr>
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Table 2
Final data on the biomechanical testing, received after a course of magnetic stimulation for BMX-racing

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<th>( t_{lp} )</th>
<th>( t_{\text{max}} )</th>
<th>( F_{z}/t )</th>
<th>( t_{\text{flight}} )</th>
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Table 3
Background data on the biomechanical testing, received before a course of magnetic stimulation for athletes

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<th>( t_{lp} )</th>
<th>( t_{\text{max}} )</th>
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The augmentation of the rate of increase has occurred only at the expense of a power component of muscular work. As the data of biomechanical testing certifies that the time of maximization of the dinamogramm increases. These facts are quite explainable as there was a targeting task to develop only a power component of muscular activity.
Table 4
Final data on the biomechanical testing, received after a course of magnetic stimulation for athletes

<table>
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<td>0,28</td>
<td>6850</td>
<td>0,55</td>
</tr>
</tbody>
</table>

$t_{\text{rp}}$ – time of support phase;
$F_{z_{\text{max}}}$ – maximum force of support reaction;
$t_{\text{max}}$ – time of achievement of maximum of the force;
$F_z/t$ – speed of increasing force;
$t_{\text{flight}}$ – time of flight from platform.

Conclusions:
1. The principal possibility the force component increasing of muscle activity under the influence of magnetic stimulation in a small duration of a training cycle is shown.
2. The stimulation by an alternate magnetic field of muscles possesses targeting action that allows to solve problems of concrete physical qualities development.
3. Depending on the sport, and thus on the development of the musculoskeletal system muscles, athletes respond differently to magnetic stimulation. However it was observed the improvement of sports results both for BMX-racers and for athletes, in part, by magnetic stimulation.

References
A METHOD TO DETECT PELVIS rotation IN HORSE RIDING BY MEANS OF INERTIAL SENSORS: A PILOT STUDY

Münz Andreas, Bandow Nicole, Witte Kerstin
Otto-von-Guericke University Magdeburg, Institute of Sport Science, Germany

Introduction
Horse riding is characterized by the rider seeking to gain and maintain control over the movement of the horse. Effective controlling of the horse requires a supple and balanced seat in the saddle (Stodulka, 2008, p.123). Thus a correct seat is a precondition for giving precise weight aids to the horse. The motion sequence of the rider is described as ‘supple swinging’ (Kidd, 1983) and ‘swinging waist’ (Otte-Habenicht, 2000). Mastering this fundamental skill enables the rider to adapt himself situationally to the horse (Pfanni & Tulli, 1994). In this context especially the rotation of the pelvis is said to play a key role as it connects the body of the rider to the horse (Pfanni & Tulli, 1994; Zetterquist Blokhuis et al., 2008, Hübener, 2005). Except for rising trot the pelvis should be kept in touch with the saddle in order to transmit tactile information between horse and rider. Regarding coordination between horse and rider, Lagarde et al. (2005) assume the exchange of information through the seat to be an important factor. We therefore suggest the rotation of the pelvis to reflect the ability of the rider to follow the movement of the horse. Especially pelvis tilt and obliquity (Fig. 1) are supposed to determine to what extent the rider is able to be “glued to the saddle”. The aim of this study is to quantify the rotation of the pelvis according to the rotation of the trunk of the horse in right-lead canter (CR), rising trot (RT), and sitting trot (ST) in the field.

Fig. 1: Axes of pelvis rotation (tilt about X axis, obliquity about Y axis). Modified from (von Dietze, 2007, p. 35).

Materials and Methods
Rider and horse
One female medium level rider (27 years, 178 cm, 65kg) participated in the study, riding her own 5 year old warmblood horse. The horse did not show any sign of lameness.

Data acquisition
For data acquisition we used three 6 degree of freedom inertial sensors with a sampling rate of 120 Hz (Xsens, Enschede, The Netherlands). One sensor measuring the movement of the rider was mounted medial on the pelvis. The second sensor
measuring the movement of the horse was attached medial distally on the saddle girth close to the sternum. Thus the sensor was as close as possible to the center of gravity of the horse (Galloux, 1997) and additionally represented the most stable position for the sensor (Barrey 1997; Leleu, 2002). The third sensor was mounted laterally on the left cannon bone and measured each of the horse’s strides. Adhesive tape fixed all three sensors properly. After a warm-up phase, the participant was asked to ride 5 rounds in an indoor riding hall (40x20m), each in CR, RT, and ST respectively. In rising trot the participant should rise when the right front limb had ground contact. There was no specification about the riding speed given, but it should be as constant as possible.

**Data processing**

A complete horse stride was defined as the time between two successive ground contacts of the left front limb. Showing characteristic peaks, this event could be indentified clearly from the acceleration signal of the cannon bone. In order to analyze the data stride by stride, the data was time normalized (200 samples each stride) using a self programmed routine with MATLAB (Version 2010b, The MathWorks Inc., Natick, MA). The data was then linearly detrended and corrected for offsets.

**Results**

Rotation of the pelvis was found about both axes under investigation. Differences in the range of motion between CR, RT, and ST could be detected. Trunk rotation of the horse was in good relation to qualitative findings of Hübener (2004).

**Conclusion**

This pilot study illustrates a method for the quantification of pelvis rotation and trunk rotation of the horse about two axes in the field. Although an evaluation of the method is still missing the findings give reason to suggest feasibility in order to quantify rotation of the pelvis in different gaitis. A representative comparison between the pelvis rotation of high level riders and beginners could reveal skill depending singularities.

**References**


ADAPTATION TO THE REACTIVE STRENGTH DEVELOPMENT INDUCED WITH STRETCH-SHORTENING CYCLE PRETENSIONS

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Semmelweis University, Faculty of Physical Education and Sport Sciences (Hungary)

**Introduction:** Most of the elite athletes cannot gain their best performance; because neuromuscular adaptation doesn't evolve perfectly during the sport specific movements. The present study looked at how neuromuscular adaptation evolves during reactive strength training; and how much time needed for the intramuscular coordination to result in increased performance.

**Hypotheses:** It was hypothesized that the maximally activated muscle which was pre-stretched with optimal stretching energy, adapts in a short time. Nine training is enough to find considerable improvement in neuro-muscular coordination what indicates an increased mechanical performance.

**Subjects and method:** The subjects were twelve elite sportsmen. We measured and trained the knee extensors with MulticontII Tihanyi System dynamometer in range of motion of the greatest muscle tension. We measured the maximal eccentric torque and that angular position during eccentric contraction with 20 °/sec angular velocity. The pre-stretches started on 50% of the maximum isometric moment, with a 30° higher position than the position of the eccentric peak torque. We used different stretching energy levels to lengthen the knee extensors with 200°/sec initial angular velocity. The optimal stretching energy of the fast pre-straining was determined from which the fastest concentric angular velocity was reached. The eccentric maximal moment, the initial concentric moment and the length of the time period between these two moments were stared. The undergraduates did the reactive dynamometric training with the aforementioned optimal energy. For 3 weeks (3 times a week) the participants did 8 voluntarily stretch shortening cycle contractions four times. After the 9th training the mechanical indices determined at the starting level were also measured. Discrepancy from the mean was determined with the Student’s T-test and the relationships between the variables were calculated with correlation calculus.

**Results:** We have found the reactive dynamometric training results in significant improvement in efficiency and maximal strength. The neuromuscular coordination of the stretch shortening cycle was increased significantly due to the training program, which has appeared in the increase of the stretching peak torque that has moved to the beginning of the concentric phase. The angular velocity and angular acceleration of the concentric phase was increased significantly, which indicates an increased performance. One month later, after the training program there wasn’t significant decrease in the measured mechanical variables.

**Conclusion:** We can use our results and experiences as a training method that result an increased performance even in case of elite athletes. It can be correct the basis of useful abilities on the wide spectrum of the sports in a short time.
CATECHOLAMINE LEVEL CHANGE DURING VITA MAXIMAL TEST

Protzner,A., Trájer,E., Udvardy,A., Komka,Zs., Bosnyák,E.,
Consultant: Tóth,M.
Semmelweis University Faculty of Physical Education and Sport Sciences
National Institute Of Sport Medicine
Hungary

Introduction
Catecholamines like adrenalin and noradrenalin play an essential role in glucose metabolism in response to exercise. Adrenalin is a powerful regulator of a number of metabolic and physiological functions, and noradrenalin reflects the actions of the sympathetic nervous system. Exercise performed on intensity above anaerobic threshold leads to a marked increase in catecholamine levels.

Methods
A total of 93 subjects (68 elite athletes and 25 control) participated in this study. The athletes were from different sports: 16 handball players (19.8 hours/week), 27 football players (10.1 hours/week) and 25 triathlonists (19.7 hours/week). The mean age of the handball players was 27.81 years, of the football players 24.14 years and of the triathlonists 22.92 years.

After a medical examination and anthropometric measurements, the subjects completed a vita maximal treadmill protocol while VO2rel (ml/min/kg) was measured. Subsequently, 10mL of venous blood was extracted at rest (r) and after the test was over (max). Adrenalin (A) and noradrenalin (NA) were measured in venous plasma (pg/ml).

Statistical analysis was made by Statistica for Windows 9.0 software. One-Way Anova, post hoc Tukey test, linear correlation, Student t-test were used to learn about connections.

Results
The rest adrenalin values were significantly higher in the elite athletes group (p=0.037). The same pattern can be observed in case of rest (p=0.000) and max (p=0.004) noradrenalin values.

Football players had significantly higher rest adrenalin values in comparison to the triathlonists (p=0.002) and the control group (p=0.001). The same pattern can be observed with max adrenalin values. Football players had significantly higher rest noradrenalin values, than the handball players (p=0.000), the triathlonists (p=0.000), and the control group (p=0.000). The max noradrenalin values were significantly higher in the group of the handball players compared to the triathlonists (p=0.000) and the control group (p=0.000). The soccer players had also higher levels, than the triathlonists (p=0.000) and the control group (p=0.000).
Discussion
In this pilot study we observed higher differences at the cathecolamine values in case of elit athletes, especially in football players. The control group had nearly same values like the triathlonists. Our future aim is to increase the number of the subjects, and examine the relationship between cathecolamines from more aspects.

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Laboratory of Biomechanics and Physiology, French National Institute of Sport and Physical Education (INSEP), Paris, France.
SOMATOTYPE CHARACTERISTICS OF FEMALE DANCERS

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Introduction
Among the factors affecting the female dancers’ achievement their morphological characteristics play an important role. The assessment depends not only on traditional woman’s beauty canons but also on contemporary dominant aesthetic stereotype (N. Steinberg, et. al., 2008).

Detecting a complex of morphological indices which may determine a working capacity in any particular kind of sport is a key challenge for "teacher's selection"(E. Martirosov, 1998).

Methods
A simple anthropometric method was used for our research. The anthropometric measurements were realized by typical instruments' kit. The somatotype was determined using the Heath-Carter method.

Participants of our study were 38 female top dancers studying at "Lesgaft National State University of Physical Education, Sport and Health". There were two groups of athletes: the first one consisted of Ballroom dancers and the second one - of elite representatives of acrobatic rock'n'roll.

Results and discussion
Ballroom dancers had greater stature and body mass but less BMI. Adipose tissue distribution in this group was for 4 % more than through their opponents. The great training hours, a power orientation of work and high intensity of training session were associated in rock'n'roll with a significant greater development of relative muscular weight (47,6 +- 1.3 %). There were not significant differences in bone component.

According to the Heath Carter method two types of the body composition were allocated.

1. Rock'n'roll athletes(2,5-3,9-2,8 balls) were corresponded to the ecto-mesomorphy somatotype.
2. The main part of ballroom dancers(4,3-3,2-3,4) can be put into ecto-endomorphy somatotype.

We can explain that kind of ballroom athletes’ somatotype as a result of their specific training session where the power work is almost excluded.

Conclusion
1. The morphological peculiarities of dancers’ body composition depend on their specific training work.
2. The body compositions of rock-n-roll female dancers and ballroom female dancers are different. There are significant differences in stature of body, body mass and Body mass index (BMI) between the two groups of female dancers.
3. Rock'n'roll athletes are characterized by the ecto-mesomorphy...
The obtained morphological characteristics of dancers could be used for the sport selection.

**Literature**


Section IV

Issues of the Modern Olympic Movement
Many countries started to realize the importance of physical education and exercise in the 19th century. The athletic movement gained momentum in England, Germany, Sweden, the Netherlands, and America. The force behind the international Olympic Movement that spawned the revived Games was a French educator, Pierre de Coubertin. Coubertin was desperate to reform the education system of France. This desperation had led to his interest in reviving the Summer Games. With the inventions of railways and the telegraph, interest in international athletic competitions increased. It was the perfect time for the revival of the Summer Games, described by Coubertin as "the logical culmination of a great movement." When the ancient city of Olympia was excavated, Coubertin started to campaign for the revival of the Summer Games as an international event. His views were accepted and the modern Olympics were born in 1896. This also marks the birth of the Olympic Movement.

The Structure of the Olympic Movement: Many organizations are involved in the Olympic Movement. At the heart core of the Olympic Movement is the International Olympic Committee. The International Olympic Committee is also known as IOC. This committee can be considered to be the government of the Olympics. IOC takes care of the daily problems, and makes all the important decisions like the host city of the Summer Games. The committee also decides on the programs of the Olympics. In the Olympic Movement, three groups of organizations operate on a specified level. These groups are—

- International Federations (IFs) —these are the governing bodies of a sport
- National Olympic Committees (NOCs) —these organizations regulate the Olympic Movement within each country
- Organizing Committees for the Summer Games (OCOGs) —these organizations take care of the organization of a particular celebration of the Summer Games

The Birth of the Olympic Games
The first recorded Olympic Games took place in Olympia, in the beautiful region of Elis, in 776 BC. There is evidence however, to support the claim that the games had been taking place a lot earlier than 776 BC, but these were not as organised or held every four years, as the 776 BC games had been.

The name of each Olympiad was named after the competitor of the stadium race, which was the favourite of all the events. The first Olympiad was named Koroibos of Elis, as he was the winner of the stadium race in 776 BC. Olympia was, and still is, a beautiful place, and many temples and statues were
built. These were all built in dedication to Zeus, the Father of all Gods. Olympia also became a centre for religion in the Mycenaean period.

The temples that were built in Olympia were all for a reason, and were of importance. The temple of Zeus, had as its centrepiece, a gold and ivory statue of Zeus. Standing at about 12 meters in height, the statue was very impressive.

The statue, sculptured by Phidias, was seen as one of the seven wonders of the ancient world. Also near to the temple of Zeus, was the wild olive tree from which the wreath crowns were made and presented to the winners of the events. Legend has it, this tree was planted by Herakles (Hercules).

In the beginning, the games consisted of only one event, the running of the stadium, and lasted for just one day. However, towards the 5th century, the games were extended to five days, and more events were also added.

From 729 BC the participants of the games had to compete in the nude in order to prevent any cheating, and also in the interest of safety. Originally, only Greeks born males, who had not committed murder or heresy, where allowed to take part in the games. However, later on, Romans were also permitted to take part. Women were forbidden to compete, and were even banned from entering the stadium to watch the games.

The Importance of the Olympic Games

The Olympic Games were especially important to the Greeks, and it was the games that unified national, spiritual and racial beliefs. The ancient Greeks were also very competitive people, and all strived to be the best. Winning an Olympic event was the highest honour people could achieve.

The fact that the winners were presented with a simple olive wreath crown also illustrates the fact that the participants taking part were competing for themselves, and not any material rewards.

The ancient games were also held in high regard for social reasons, as well as the athletic side. Poets and writers were given the chance to present their works to a large audience, members of different city-states would have the chance to meet and talk with members of other city-states.

Leaders of the city-states would also come to discuss any personal differences that they were having with each other. The games were seen as a festival, and it was not acceptable for any negative issues or situations to occur during this time.

Even during times of war and battle, and differences were put aside, so that the Olympics would be conducted in a peaceful manner. Even the games of 480 BC took place in the middle of the Persian War.

It is from this ideal that the Olympic Truce was formed. During the times of the Olympic games, messengers were sent all over the Greek world with details of the dates of the games, and called for a truce between any parties conducting in any hostile activities. There was also a ban in any death penalties being carried out during this time.

Nineteenth-Century Greece

The Olympic Games were revived in 1896. At that time, the United States was still sorting out the enormous ramifications of the Civil War.
Similarly in Europe, colonial wars drained the participating nations and set back intellectual life. On 25th of March, 1821 (75 year prior to the first modern Olympiad), the Greeks revolted successfully against the Ottoman Empire. From that time until the end of the 19th century, Greece would be consumed trying to re-claim her territories and reestablish her cultural identity.

At first glace, the political landscape of the 19th century was prohibitive towards any athletic movement of substantial magnitude. Fortunately, that was not the case. Technological advances brought the world closer, and the isolationism prevalent during the Middle Ages has lost its sway long ago.

The culture of ancient Greece was, for the good part of the 19th century, a focal point for every intellectual movement in the Western world. Science, literature, art, and architecture looked back to the ancient writers for inspiration. Excavations in ancient Olympia were in progress and there were a constant stream of publications as a result of that effort. Coubertin, an educator in France, searching for ways to offset the negative effects of the Franco-Prussian War (1870) found his solution in the ancient Olympic Games.
Introduction. Humanization as one of the most important tendencies in education defines the need for new alternative sources of education, that preach the universal moral and spiritual values. Olympism and the Olympic movement serve as these sources.

The notion of «Olympic education» was formulated in the paper written by S. Favre (Italy) at the 8th session of the International Olympic Academy in 1968. As for the science of our country the interest to Olympic education was identified in 1980th. It was presented by works of V.S. Rodichenko and V.I. Stolyarov.

Olympic education is a type of education, which in modern pedagogy is considered as the process and the result of purposeful, educationally organized and systematic human socialization [1]. One may ask about the connection of Olympic education and socialization at different stages of age-related development.

Methods. Schoolchildren of 5th classes have taken part in the research (n=41) Cherepovets Secondary school №26.

The assessment of Olympic erudition of the pupils of the fifth classes was held by means of a questionnaire [2]. This questionnaire included questions and tasks on revealing the formation of cognitive and axiological components of Olympic erudition.

For example, «In 2014 in Sochi will be held: 1) Summer Olympic Games; 2) final matches of Football World Cup; 3) Winter Olympic Games; 4) final matches of the World Hockey Championship". "During the match of children's hockey teams, one of the teenagers broke the stick, and you have a spare one. Underline what you would have done: a) I will give him my stick, if it happened in my team, b) I will give him my stick, even if it happened in the opposing team, and c) will not give in any way, d) I do not know what to do».

The rating of pupils’ socialization was carried out by means of the methods suggested by M.I.Rozhkov [3]. As indicators of socialization of the student’s personality, the author determined the level of social adaptation, activity, autonomy and moral education. This methodology is based on an assessment of students' degree of agreement with 20 statements ("I can forgive people," "I want to be ahead of others in any case," "If I do not like people, then I will not talk to them," etc.). Evaluation was carried out using the following scale: 4 - always, 3 - almost always, 2 - sometimes, 1 - rarely, 0 - never.

For establishing the degree of connection between the level of Olympic education and socialization of students’ personality, the correlation analysis - calculation of Spearman's rank correlation coefficient was used.

Results. The results of evaluation of Olympic education and socialization are presented in the table.

Distribution of fifth graders on the levels of Olympic education
and socialization, in %

<table>
<thead>
<tr>
<th>Level</th>
<th>Olympic education</th>
<th>Socialization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above-average</td>
<td>31,7</td>
<td>39,0</td>
</tr>
<tr>
<td>Average level</td>
<td>51,3</td>
<td>48,8</td>
</tr>
<tr>
<td>Below-average</td>
<td>17,0</td>
<td>12,2</td>
</tr>
</tbody>
</table>

The received Spearman rank correlation coefficient between the results of evaluation of Olympic education and general socialization of fifth graders was $r_{spear} = 0.386 > r_{0.05} = 0.31$, indicating the reliable positive connection.

The results of assessment of value relations of fifth graders to the sport using the technique "unfinished thesis" ("Sport - it's ...") are of great interest [4]. Most of the respondents (about 61.0%) associate sports with doing physical exercises, influencing the development of physical qualities, the promotion of health. 9.6% - found it difficult to answer or defined sport as a "occupation of people."

Only 26.8% of fifth graders find the importance of sport in other aspects of life ("support people," "fun," "an important part of life," etc.) and only one of the respondents pointed to a fundamental characteristic of sport - competition.

**Discussion.** Thus, there is a problem of lack of understanding of the specifics of adolescents and the importance of sport in people’s life and society. The presence of significant correlation suggests a causal link between the use of Olympic education and the formation of general socialization of the fifth graders. Consequently, there is evidence of scientific and practical considerations for promotion and experimental verification of the hypothesis on the positive influence of Olympic education on the level of general socialization of schoolchildren in the transition from primary to basic.

**Summary and Conclusions.** In general, the survey revealed the following:

- Olympic education as a special case of education can be considered as a process of socialization of the schoolboy;
- Indicators of Olympic education and general socialization of primary school graduates are positively correlated with each other.

Since there is a contradiction between modern scientific ideas about the dual nature of Olympic education and its practical implementation in the school, which emphasizes knowledge components (informational, cognitive), it seems appropriate the development and implementation of variable component in the curriculum on physical education of additional Olympic education program (perhaps regional), where the moral values of Olympic culture would become an independent subject of mastering.
Bibliography


THE ROLE AND IMPORTANCE OF OLYMPIC EDUCATION IN THE UPBRINGING OF YOUNG STUDENTS

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Increasingly important role in education, upbringing and education of youth is an Olympic education, whose purpose - to involve young people in the ideals and values of Olympism. Involve young people to the ideals of Olympism, which focus on universal, humanistic moral and spiritual values associated with sport, especially important in the present conditions of our country - given the failure of previous ideological stereotypes, as well as taking into account the sweeping part of the youth over pragmatism, nihilism and indifference to spiritual values.

As part of the Olympic movement the main shortcoming of current theory and practice of educational activities is that of her, as a rule, snatch some aspects, blocks, components are held separate, unrelated actions, events. Currently, there is a need to reflect on the transition and implementation of this activity as a specific system. In this system, there are three closely related moment, yet separate (independent) components of the Olympic education that involve the formation and improvement in young people: a) certain system of knowledge, and b) a particular system of motivation: the interests, needs, values, attitudes etc., and c) a specific system capabilities and skills.

The Olympic movement is interconnected and interdependent with the sport of high achievements, this means that the educational activities within the framework of this movement should be geared to generate interest among young people in sport, the need for systematic sports, the desire to show the highest possible athletic performance and knowledge from history and contemporary practice of the Olympic movement. To indicate the direction of educational activities within the Olympic education, the term "sports rekord." It occupies an important place in the Olympic coach, the leaders of the National Olympic Committees, etc.

Given the importance and value of sport and the Olympic areas of education, as well as the fact that the modern Olympic movement has a strong humanistic orientation and is intended to promote the humanistic ideals and values, so the purpose of educational activities within the Olympic movement should be the humanistic impact on the individual specific means, due to the nature of this movement, its relationship with the sport. Consequently, it must be "sports-humanistic" nature, being aimed at developing youth knowledge about the humanistic ideals and values that can be implemented in the sport and through sport, interest in them, a desire (even need) to implement those skills, which really let you do it, as well as the emotional reactions that contribute to this.

As part of the Olympic education must be addressed group of related tasks that involve the formation and development of young people:

- Interest in the sport, the need for systematic sports, the desire to show the
highest possible athletic performance;
- Focus on healthy lifestyles, the manifestations of aesthetics, morality, culture, and humane treatment of people with each other and to nature, etc.;
- The need for active sports for the harmonious and comprehensive development, improvement of physical abilities;
- Interest in the Olympic Games and the Olympic Movement;
- Willingness to participate in Olympic competition and show them in an honest, noble, chivalrous behavior (in accordance with the principles of "fair play");
- Aspirations to be a member of the Olympic movement, to explain and propagate the ideas of Olympism, to promote its development;
- Humanistically oriented system of feelings and emotions (feelings of personal responsibility for the implementation of the sport and through sport, humanistic values, except in its hostile manifestations, for the successful development of the Olympic movement, the aesthetic sense of beauty of sports, feelings of resentment related to any violation of morality) and etc.

An important task of teaching activities within the Olympic movement is also in the development and improvement of youth-oriented humanistic whole range of abilities, skills and abilities:
- Ability to use sport in combination with other agents in a healthy way of life for the formation of physical culture;
- Ability to achieve excellence in sports, but at the same time so to build their sports that they are not harmful to health, do not lead to a one-sided, ugly personality development;
- Habit always to lead an honest and fair fight, to show courage and will to the sport, sporting events, as well as the belief that only such behavior is only true in sports;
- Aesthetic ability to see, feel, and properly understand the beauty and other aesthetic values of sport, work in sports, "according to the laws of beauty" and display it by means of art;
- The skills to communicate with other athletes, coaches, judges, journalists, spectators, etc.;
- Skills such relationship to nature in the sport, which meets the requirements of high ecological culture;
- Ability to explain and propagate the ideas of Olympism.

The solution to these problems - one of the weakest links in educational work with young people, currently being undertaken within the framework of the Olympic movement. Analysis of papers devoted to the problem under discussion, as well as real-world work on Olympic education of children and young people shows that many of these problems are often overlooked.
SOCIO-DEMOGRAPHIC DETERMINANTS OF SUCCESS OF THE NATIONAL OLYMPIC PREPARATION SYSTEMS IN WINTER SPORTS

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Introduction

According to our definition, the national Olympic preparation system (hereinafter - the NOPS or system) is a structural unit integrated into the practice of many years training of elite athletes, which can be characterized by several most important interrelated elements of organizational and methodical nature, arranged in such a way as to ensure that the most gifted athletes qualify as Olympic Games participants and reach the targeted level of an overall national country performance in this competition. We have modeled the fundamental structure of the NOPS. Several of its isolated components and elements have been marked out. We are sure that managing them on the basis of transferring and using the best experience potentially increases the success of any system. The fundamental factors that contribute to or, conversely, impede the Olympic success have been identified. Those include, in particular, several socio-demographic determinants. In this context, it seems particularly urgent to find the solution to the following problems: 1) how to reliably identify the excellence sources of Olympic preparation systems, 2) how to establish measures of influence of socio-demographic determinants on the country’s Olympic success. The latter is necessary to assess the possible impact of the onerous financial investment and labor-intensive organizational and methodological transformations in the course of NOPS modernization.

Methodology

We have devised and published previously the methodology for determining success of the NOPS by their relative efficiency and productivity. Our method allows evaluating objectively and in dynamics the aggregate achievements of the Olympic participant countries. At the same time it eliminates the confounding factor of population and programme expansion, takes into account the popularity of competitive disciplines and their individual or team specificity.

In the present study we examine the ranks taken by indices of productivity and relative performance of systems in different countries on the basis of the last five winter Olympics, the dynamics of countries’ positions in the unofficial team standings, and the relationship of the three indicators with the population, gross domestic product per capita, index of the countries’ humanitarian and economic development.

The similar work has been done on the material of the last four summer Olympics for control. We used our previously compiled computer database that includes all Olympic medal winners and the official UNESCO statistics.

Results and discussion

As in the case of the summer Olympic Games, the countries leading in the unofficial team standings after the winter Olympic Games do not take top rankings in their NOPS productivity. The only exception is Norway. The results of last five
Winter Olympics indicate the presence of three major centers of winter sports with the high level of NOPS productivity. These centers are formed by the countries located in close vicinity to each other: 1) Norway, Sweden, Finland and Estonia in Northern Europe; 2) Austria, Switzerland, Croatia, Czech Republic in Central Europe; 3) Canada and (to a lesser degree) the USA in North America. After gaining independence, only 7 of 15 former Soviet countries have been able to achieve Olympic success (Uzbekistan - once, Latvia - twice, Estonia, Kazakhstan and Ukraine - three times, only Belarus and Russia have won medals in all five Games). A positive trend of NOPS productivity is shown by Latvia, Belarus and Estonia. The Olympic preparation system in Belarus after exhausting all the “Soviet reserve” was able to readjust to the realities of modern sport and maintain its productivity. Negative trend is typical for Uzbekistan, Kazakhstan, Ukraine and Russia. Russia’s relative success in Turin was replaced by a failure in Vancouver.

![Picture 1. The dynamic of productive rating of NOPS that have prepared prize winners on the winter Olympic Games 1994 – 2010.](image)

It has been established that the population has no effect on the number of medals won (-0.066<R<0.173). The relative NOPS effectiveness (-0.173<R<0.067) and their productivity (-0.203<R<-0.161) have no connection with the respective country population.

Unlike the situation with the last four summer Olympics, after analyzing all the data on the countries that prepared the winners of the last five Winter Olympic Games we see a steady one-way tendency of a positive impact of economic and
human development indices on all indicators of the NOPS success (1994: 0.160<R<0.360; 1998: 0.124<R<0.348; 2002: 0.259<R<0.483; 2006: 0.319 <R<0.487; 2010: 0.350 <R<0.577). There is a gradual transition of the relationship closeness from a weak level to an average one.

Differentiation of countries into two groups in terms of population (the second group of countries in this case, as a rule, are more developed) and two categorical levels of economic and human development is an even more convincing evidence that it is the countries with a higher level of economic and humanitarian development that have succeeded at the winter Olympic Games in recent years. In this case, the relationship of economic and human development indicators with those of the NOPS success in some cases (developed counties including the sparsely populated ones) go into the category of strong positive.

The dynamics of R which characterizes the relationship of the GDP per capita with productivity of the NOPS is especially revealing in this case (1994: 0,212<R<0,468; 1998: 0,269<R<0,479; 2002: 0,434<R<0,533; 2006: 0,558<R<0,727; 2010: 0,775 <R<0,846). It is interesting that according to the results in Vancouver-2010 (we are talking about sparsely populated countries) the relationship between the number of prizes won and GDP per capita is at the level of R = 0,859, and the relative effectiveness between NOPS and GDP per capita is at the level of R = 0,912 (!).

The relationships between GDP per capita and indicators of the NOPS success in developing countries are much smaller than in the developed countries, and sometimes they even change their direction. As an example we turn to the results of Vancouver-2010 starts again. GDP per capita in developing countries is virtually unrelated to the number of medals won by these countries (R = - 0,287, R = 0,211), as well as the relative effectiveness of the NOPS (R =- 0,338, R = 0,300), or is moderately positively correlated with the productivity of the NOPS (R = 0,265, R = 0,595).

As we found out the nature of relationship between indicators of democratic development of countries with indicators of the NOPS success in winter sports fits into the overall picture.

**Conclusion**

Only the rapid economic and human development can significantly strengthen the position of most countries, including Russia, in the unofficial team standings at the winter Olympic Games. The population has no significant effect. In comparison with summer sports, in this case it is significantly more important to have a modern methodical and organizational system of many-years Olympic preparation. Winter sports impose strict requirements on infrastructure, equipment, inventory, scientific and methodological support, system of competitions, etc. Providing most of the necessary conditions without exiting to the level of economic and human development, comparable with the level that competitor countries have, is problematic. The prospects of efforts targeted to improve the organizational and methodological elements of the NOPS in winter sports with an incomplete elimination of the limiting factors of economic and humanitarian nature give rise to doubts.
OLYMPIC MOVEMENT IN BRAZIL

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Introduction: Historical research of physical education development allows us to trace an inextricable connection between the past and the present and their links. This consistent patterns research gives the opportunity to determine the direction and character of future physical education and sport development in different countries.

At that point, studying the Olympic movement in Brazil helps to identify features of the formation and development of summer and winter Olympic disciplines. Analysis of historical literature has shown different spheres of sport development: school sport, student sport, national sport, winter sport, summer sport, and finally, Olympic sport. Within the limits of our work we are not able to study all these areas. So we have chosen the following: “Olympic movement in Brazil”.

The object of research - Olympic movement in Brazil
The subject of research- the process of Olympic sports in Brazil
The purpose of the research is to identify the status and level of development of Olympic movement in Brazil

Working hypothesis: The analysis of development of Olympic disciplines in Brazil will help to assess the level of sport development in this country and identify the prospects for its further development.

To achieve research objectives the following tasks were set:
To determine the structure of sport in Brazil and to present it as a scheme;
To identify the main directions and prospects of the development of Olympic movement in Brazil;
Results: According to the research of Professor J.P. Simakov in 1972 the sport movement in Brazil is headed by a public authority - the National Council of Sport (NCS), that is under control of the National Congress and the Ministry of Education and Culture, which have the wide autonomy but almost devoid of public funding.

The NCS joint with the NOC and by the agency of Brazilian Confederation of sport (CBD) leads by the sport federations, which in turn control the activities of sport clubs.

The results of performance of Brazilian athletes are very unstable for the following reasons:
• economic instability in the country;
• lack of public support for sports organizations;
• fragmentation of sports associations.

The most interesting results of the performance of Brazilian athletes were emerged in the competition of the last decade. These results are shown in Figure 1.
The figure 1 shows the results of performance of Brazilian athletes at the Olympic Games in Sydney in 2000. Brazilian athletes were not very successful there, taking only 55 place.

They won only 6 silver and 6 bronze medals in the national team place. This result can be assessed as an unsuccessful performance.

Such unsuccessful performance gave rise to concern of the sport management of the country.

There were taken steps to optimize the athletic performance in the country. This active work has yielded results that is shown in the table 1.

At the Olympic Games of 2004 in Athens the Brazil team took 16th place in the national team place, winning the 5 gold, 2 silver and 3 bronze medals. It was a great success of the team of Brazil, compared with 2000.

At the Olympic Games in Beijing Brazil took 23th place in the non-official team placing, winning 3 gold, 4 silver and 8 bronze medals.

After 2004, the government of Brazil has implemented a program of economic stabilization that led to some decrease of sport results, because of the necessity of the huge investments in the elimination of social inequality in the country.

The poverty rate fell by 67%, social inequality in Brazil has reached the minimum targets.

Conclusions:

1. Changing of the sport movement management structure is a positive step to improve the athletes’ results.

2. Realization of the economic stabilization program covers all social groups and suggests to improve sportsmanship of the athletes of Brazil at the Olympics.

3. Improvement of the socio-economic situation of the country predetermined the election of Rio de Janeiro as the host city of XXXI Olympic Games.
Introduction. The XXII Olympic and Paralympic Winter Games in Sochi in 2014 will be Russia’s first Winter Games. We all remember how the citizens of Sochi were happy in July 2007 when they learned about the victory of Sochi in that difficult contest for the right to be a host-city of the XXII Olympic Games. But time is passing and Olympic euphoria is replaced by anxiety. Organizers face a lot of problems.

The problems of Olympic Sochi are:

1. **Transport system.** Sochi is already on the threshold of a transport collapse. Unfortunately the basic means of (242 billion roubles) is planned to allocate not for the developments of transport highways and outcomes in the city, where the transport stream is the strongest one, but on the roadsheaf building between Adler and Krasnaya Polyana. Besides the difficult mountain relief of Sochi leads to the building of a transport infrastructure. It is entiled to necessity to construct a lot of tunnels and bridges. It is very expensive and that is more important long.

2. **The system of water-supply.** The condition of water-supply and water drain of a city is extremely unsatisfactory. Both systems were designed for the city with not more than 240 thousand of persons. But now the population in the Big Sochi is more than 400 thousand people. And about 250 thousand persons is expected to arrive during the Olympic Games. The full replacement of a city sewer network is required.

3. **Ecology. Water resources.** The unsatisfactory condition of system of water supply and water drain influences extremely negatively on a condition of sea water. It is not difficult to imagine the quality of sea water in area of Sochi if there will not be carried out the adequate modernization of both systems. **Beaches.** The best beaches are intended to give up under two cargo ports. They are supposed to be constructed in Imeretinsky lowland. According to ecologists the realization of these projects will lead to destruction of beaches and to utter annihilation of last ecosystems in Imeretinsky lowland. It should be mentioned that these termination port capacities will not be used after finishing of the Olympic Games. **Reserve.** Many scientists believe that the creation of an Olympic infrastructure in Sochi will cause an irreplaceable scale damage to the unique wild nature and a biological variety of the Western Caucasus. The next years Russia can lose a unique popular mass seaside resort.

4. **Economy of Sochi.** Olympic Games can cause a huge damage to economy of Sochi. **Population.** A number of new Olympic objects are planned to place in Imeretinsky lowland. But today people live there. The authorities made a decision to move people from their houses and destroyed...
them. The population must get the compensation for their property and new houses before they will be removed. **Tourism.** It is a well known fact that about 50% of the population of Sochi has the private business connected with health-resort visitors. Transformation of a city into huge building for some years will simply frighten off from a city of lots of tourists.

5. **Personnel and their qualification.** It is one more important problem. 170 thousand persons are required for the Olympic Games. All “Olympic staff” should be trained English language. But the investments for this process of training is not supposed.

6. **War threat.** At last, it is not necessary to forget that Sochi is in a zone of military opposition between Russia and Georgia. A new flash of the military conflict is not excluded. It creates a threat of safety of Games. Any of the Winter Games were not held so close to the centre of confrontations.

**Conclusion.**

We can’t deny that the Games are an important geopolitical project for Russia, organized in order to raise the international prestige of our country. To keep the Olympic Games of 2014 in Russia, there is a unique decision - to decentralize them and to organize the Olympic events in the cities where there are ready sport facilities and the infrastructure allows to receive visitors of the Games. The realization of it will save huge budgetary expenses, to lower infrastructural and an ecological load to Sochi, to rescue a unique seaside resort from destruction. All of these will help to spend the Olympic Games successfully.
Introducing winter sport in Australia

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Introduction: The Commonwealth of Australia is a country in the Southern Hemisphere. It consists of six states (New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia) and two territories (Northern Territory and The Australian Capital Territory).

Sport in Australia is popular and widespread, especially its summer kinds. It is a very striking fact but winter sport is developing, and Australians already have excellent results at certain winter sports. That’s why our research is relevant. But there is a lack of information that Russians can receive in their native language. All works are published only in English.

The aim of our research is to analyze the main stages of winter sport development in Australia.

To achieve the aim the following objectives were formulated:

1. To determine the organize structure of winter sport in the Commonwealth of Australia and to present it as a scheme;
2. To analyze Australians achievements in winter sport;
3. To study the prospects of developing at Australian winter sport.

To solve the objectives the following methods were used:

1. Literature survey;
2. Theoretical analysis and general conclusions.

We have tried to show Australian sport infrastructure as a scheme.

Results:
The Australian Sport Commission (ASC) is the governing body responsible for distributing funds and providing strategic guidance for sporting activity in Australia. It implements national sports policy through the divisions, such as the Australian Institute of Sport (AIS), Community Sport and Sport Performance and Development.

The National Olympic Committee (NOC) appeared in 1895. John Coates is the president. The AIS and AOC formed the Olympic Winter Institute of Australia (OWIA) after the 1998 Winter Olympics. It should be noted that the Australian Institute of Sport and the Olympic Winter Institute of Australia are not educational institutions. OWIA is a federal government funded elite sports training institution for the purpose of training athletes and coaches in sports involved in the Winter Olympics. It provides training in alpine skiing, freestyle skiing (including aerial and mogul), snowboarding, short track speed skating and figure skating.

In spite of location in Southern Hemisphere cross country skiing is possible in the Australian Capital Territory as well as New South Wales, Victoria and Tasmania, but Alpine skiing currently exist only in New South Wales and Victoria.
The Australian Alps are the main region in which skiing in Australia takes place. Skiable terrain stretches through large areas of territory from June to October.

Australia first competed at the Winter Olympics in 1936. Its sole athlete, Kenneth Kennedy participated in speed skating. And with time Australian team increased. Supervision and support for the athletes were relatively minimal in the early ears. The chairmen of selection committee were representatives of summer sports, so they didn’t believe in success of winter sport athletes and openly ridiculed them. A dismissive attitude for winter sport continued for 40 years. Then in 1976 Geoff Henke was appointed to the post of team manager. He took steps to increase the financial standing of Sport Associations and to create modern training programs. Besides he was inaugural chairman at the Olympic Winter Institute of Australia. Active work of Henke led to great result: in 1994 the short track relay team won first Australian Winter Olympic medal, a bronze. In 2002, Australia won their first 2 gold medals, the first time any southern hemisphere country had won an event. 2010 Winter Olympics became the most successful for Australia. They won 2 gold medals and one silver medal. Although in Winter Olympic Games Australians have never been at a prize-winning position in a team medal count they had 5 golden, one silver and 3 bronze medals.

The most outstanding Australian athletes are: Jacqui Cooper, Lidia Lassila, Dale Begg-Smith, Alisa Camplin, Zali Steggall, Tora Bright, Steven Bradbury and others.

Concluding part: Australian government puts great investments in winter sport. In 1993 a training centre and base called Sonnpark was set up near Innsbruck, Austria, a joint venture between the Australian and Austrian Olympic Committees. In 2010, the OWIA` s new training base, Icehouse, was opened in Melbourne. The largest facility at its type in the southern hemisphere, it features 2 large skating rinks and cost 58 millions Australian dollars. Australian athletes and coaches have opportunities to practice abroad and since recently in Russia. The agreement was signed on the 7th of September between the Australian and Russian Olympic Committees. We think that it is very significant for both countries. And it opens great opportunities for Russia as well as for Australia.

Conclusions:
1. We attempted to present Australian sport infrastructure as a scheme. OWIA gives great opportunities for its athletes to practice and perform.
2. The Commonwealth of Australia is a single country at the Southern Hemisphere that has gold medals at Winter Olympics. And it means that Australians had great efforts behind these medals.
3. Australian winter sport has strong support from its government. It is expressed in funds, sport facilities, foreign training sessions etc. So the results of Australian athletes have good prospects to be in progress.
Introduction: The analysis of the structure and modalities of the IOC rules has shown that the choice is carried out at regular intervals, it is limited to a certain range of programs. This may be the choice of the new IOC President or the choice of the next Olympic Games host city. They both are made from a predetermined range of applicants ("packages").

A voter in fact can not select multiple capitals of Games, guided by the idea that the sailing competition, for example, it would be better held in Rio-de-Janeiro, and athletics in Moscow. Or hospitality program for guests and athletes better in Madrid, and the possibilities of IT solutions and offers is the best one in Tokyo. Thus, the choice made in favor of only one candidate. And those of programs that are known to be better with the other candidate, in this case are as “good with a load”.

It is important to point out that in the IOC and modern Olympic movement work can be traced desire to realize the idea of "micro space", formulated by the American President John Adams in 1780s. He believed that Parliament should be accurate portrait in miniature of the people as a whole [3]. In our case we are talking about the Olympic Movement, the governing bodies which consist of representatives of different nations. But this etalon case. In fact, a disproportionate number of representatives of nations or populations of such countries, nor the level of their involvement in the Olympic movement, nor any of their sports achievements. Unfortunately, the relationship between decision making and level of economic development of member countries and their political influence is observed.

Results: The history of the modern Olympic Games (since 1896) shows that the right to host the Games of Olympiad or Olympic Winter Games was granted to the cities from high developed countries, which form now the so-called Club «G8»: USA (8 times hosted the Games, GDP per capita = 45800), France (5 times, GDP per capita = 41500), UK (3 times, GDP per capita = 42700), Germany (3 times, GDP per capita = 40400), Canada (3 times, GDP per capita = 43500), Italy (3 times, GDP per capita = 35900), Japan (3 times, GDP per capita = 34300).

The Olympic Games are very expensive event and not every country can afford it. IOC shall provide their financial stability, which depends on the income of each Olympic Games Organizing Committees. Therefore, the struggle of countries with weak economies to host the Olympics often finish at the stage of choosing a candidate city. The final choice is made between the developed countries representatives. These cities can spend on the Games the necessary funds, which allow to get a profit from the Games in future. Thus, there is a
conflict between the ideas and ideals of the Olympic movement and the IOC and their actual deeds. Even the recent decision to hold the 2016 Olympics in Rio de Janeiro, unfortunately, does not give the right to speak about positive trends.

Olympic movement has a procedure for choosing the capital of the next Olympic Games. As the other large institute IOC has its own rules. The choice is doing from a limited number of participants, which is formed by the IOC during the pre-selection.

In 1998-1999 the crisis in the Olympic movement had happened. It linked with the abuses and corruption in the choice of the capital of 2002 Winter Olympics. After that selection procedure of candidate cities and the capital of the Games has been changed. IOC has developed a special system of Applicants and Candidate cities estimation. When the two-phase candidature procedure was introduced, the IOC Executive Board considered that the assessment of Applicant Cities should be supported by a software decision-making program.

“Decision Matrix” was selected from a number of options to assist with the assessment of the 2008 Applicant Cities, based on its experience with projects of a similar nature. Decision Matrix was formed in 1983 for the purpose of developing decision software catering to large and very specific decision-making processes in organizations. In consultation with the IOC, Decision Matrix developed the “OlympLogic” decision model. The OlympLogic program enables an assessment of the Applicant Cities on the basis of a number of IOC specific criteria. Matrix was successfully used by the IOC in the assessment of the 2010, 2012 and 2014 Applicant Cities, as well as in the assessment of the bidding cities for the 2010 Youth Olympic Games.

Candidature Acceptance Procedure includes 11 indicators: 1) government support, legal issues and public opinion (including compliance with the Olympic Charter and the World Anti-Doping Code); 2) general infrastructure; 3) sports venues; 4) Olympic Village(s); 5) environmental conditions and impact; 6) accommodation; 7) transport concept; 8) safety and security; 9) experience from past sports events; 10) finance; 11) overall project and legacy. Each indicator can be in diapason from 1 to 10. But the acceptable minimum is six. If city receives less than 6 then this indicator is colored in matrix in red color. It is the signal that city has not enough developed in this sphere.

The geography of the countries applying for the Olympic Games in recent years has grown significantly: Azerbaijan, Thailand, South Africa, Malaysia (Games of Olympiad), Poland, Slovakia, Kazakhstan (Olympic Winter Games). These examples show that the Olympics are extremely popular and attract a large number of countries wishing to undertake them. Applicant countries have come to expect from the Olympic Games a strong impetus for economic development and social services through their impact on economic growth.

As we can see Olympic Games bid process includes a very complex and costly procedure for choosing the capital of the next Olympic Games. And as any selection procedure it still can be associated with possibilities for abuse, lobbying, corruption, etc. There are 3 main types of manipulation: from organizers side (IOC), from the participants side (candidates to host the Games) and mixed type.
The Analysis of Olympic Games elections since 1972 shows the following regularity:

1. The majority of the IOC members have an exact scheme of voting before it starting. This scheme is based not only on real IOC Member preferences (Sydney 2000, Nagano 1998, Atlanta 1996).

2. The votes which were given for the first outsider mostly goes to the city, which finally wins. But it is take place only if there is no other candidate cities from the same continent or economic area (Sochi 2014, Vancouver 2010).


What are the possible reasons for this situation?

Let’s look on “principal-agent” problem. Agent (IOC member) will receive compensation only if the deal goes through. The rate depends on the amount of the transaction (eg, a fixed percentage). In this case also may be the likelihood of abuse - double sales of the vote. The IOC member may agree with the different parties to support a particular candidate city and secure income with 100% probability. In fact, he may vote for whom he wants. And in case you lose one of the candidate cities to say that he voted in support of it and there is no his guilt in losing. In this case, he will receive income from the other (winning) candidate, if pre-entered into an informal agreement with it.

The possibility of such behavior is high because everything regulated by informal relationships and keep track of how to behave 100% of IOC members - is impossible. Sochi 2014 can be analyzed as an example of informal agreements and logrolling [2, 5].

Conclusions: So we can see that information asymmetry in decision-making process (the existence of special interest groups, an active lobby, a large bureaucracy) is still exists in Olympic movement. Limited control over the bureaucracy. The rapid growth of the IOC apparatus creates new and emerging issues in this area. There is a correlation between number of candidate cities and corruption problem. Cities and countries are ready to participate in Olympic Bids as long as the procedure is stored in at least a hint of fair play. This fact can explain the low number of applicant cities to host 2018 Winter Olympics.

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5. Russia is not scarred for Europe. It is the part of Europe. Izvestiya, №117, 06.07.2007. In Russian
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HISTORICAL ASPECTS OF OCCURRENCE OF THE OLYMPIC WINTER GAMES

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Introduction: The Olympic Winter Games are one of the brightest events in modern sports. They by the right become an integral part of world culture.

Methods: theoretical analysis and generalization, analysis of literature and periodic press.

Results: The idea about the organization of the Olympic Winter games has arisen practically simultaneously with a birth of modern Olympic Movement. Substantially it was promoted by circumstance that representatives of winter sports – skaters – were pioneers in carrying out of large international competitions – the World and European championships.

High-speed skating and figure skating was supposed to be included in the program of the Olympic competitions during the historical congress on June, 23rd, 1894 in Paris on which the idea by Pierre de Coubertin about revival of the Olympic Games has been unanimously supported.

However because of absence in Athens sports facilities for winter sports could compete, the idea has appeared unfulfilled.

Besides, habitual stereotypes of thinking and representation about traditions of Ancient Greek Olympic Games, hadn't something in common with winter sports and it also has played a braking role in the course of inclusion of winter sports the Olympic orbit.

The practical implementation of the idea to include winter sports in the program of the Olympic Games originates since 1908.

Greece by right possesses a predominating role in carrying out of the Games of the I Olympiad, and France become the first country where the Olympic winter games were held.

The evolution of idea life about carrying out of the international competitions under the patronage of the International Olympic Committee occurred more quarter of the century and was carried out only in 1924 in the French city of Shamoni.

Evolution in sights and acts of supporters and opponents of the Olympic Winter games, expansion of the program of winter competitions, structure of participants and change of the relation to Winter Games of the world sports public occurred gradually - from indifference and negativism - to comprehension of huge positive potential and beneficial influence of olympism on development of winter sports in the world.

One of the first offers on inclusion of winter sports in the program of the Olympic Games has sounded on May, 18th, 1899 at the constituent Assembly of the Czech Olympic Committee. The revolutionary idea was stated by the known
sports figure Joseph Rossler-Orlovsky who has declared aspiration just created NOC to organize in Czech mountains competitions of skiers within the framework of the program of Games of II Olympiad of 1900

The IOC has seriously apprehended this idea, correspondence between Pierre deCoubertin and J.Rossler-Orlovsky in which practical questions were discussed, however was fastened then ambitious plans of the Czech sports leaders haven't been carried out.

It is remarkable that is primary even Coubertin carefully, and even with certain fear concerned idea of the organization of the Olympic Games on winter sports as independent competitions because, it could create certain risk of split of the Olympic Movement.

The issue on the Olympic winter games became for long time the serious factor of disagreements among members of the International Olympic Committee. Problems were and that the international associations on winter sports have arisen considerably after the organizations which have united representatives of summer sports.

The international hockey league is based in 1908, the International ski federation - only in 1924. One of the reasons of why the Olympic Winter Games have been organized only almost 30 years after carrying out of Games of I Olympiad, that competitions on many winter sports have got the international character only after the end of the First World War.

Concluding Part: On May, 27th, 1925 the IOC has approved the draft of the Charter of the Olympic Winter Games. In the document it was underlined that «the International Olympic committee intends to spend a special cycle of the Olympic Winter Games, in the same years, as Games of the Olympiad. They will receive the name I, II, III (and so on) the Olympic Winter Games.

Prizes, medals and diplomas should differ from what are provided for the Games of Olympiad and the term "Olympic Games" shouldn't be used thereupon. The international Olympic Committee will define a place for carrying out of the Olympic Winter Games, and to give a priority to the country arranging Games of Olympiad provided that the country can provide convincing guarantees of the ability to organize the Olympic winter games in all their integrity ».
THE IMPACT OF THE GAMES OF THE OLYMPIAD ON THE
TOURISM INDUSTRY IN THE HOST COUNTRIES

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Introduction: Preparing for the Games of the Olympiad the host countries are planning to increase tourist flows to the Olympic capitals not only during the Olympic campaign but also after it. Lately not enough attention was paid to tourism within the Olympic legacy research.

Methods: The methodological base of the given work is the theoretical analysis and generalization, analysis of literature and periodic press.

The main objective is to study the tendency of tourism development in the context of the Games of the Olympiad organization.

The following tasks were set proceeding from the main objective:
- to determine the Games of the Olympiad influence on the development of the tourist industry in a host country;
- to examine the innovations’ influence on the development of the tourist destination;
- to reveal the main principals of interaction of the Games organizers with the tourism industry.

Results: The Games of the Olympiad contribute into the strengthening of a host country position on the international tourism market. The Games’ influence on tourist industry is assessed in long-term and short-term prospects.

Short-term planning includes the tourist activity during the Games of the Olympiad, as well as immediately before and after.

The main aim within long-term planning is to use worldwide attention to the Games for popularization of city, region and country images. It is necessary to organize the work with the mass media during the Games, before and after them. The aim of this work is to introduce a country as a tourist destination. Just during the Games the mass media is mainly concentrated on sports events. That’s why it’s very important to provide it with extra general information about the country. One of the means to advertise tourism places of interest is the detailed coverage of the Olympic torch relay route.

Another important aspect of tourism development is the cooperation between TOP partners of the International Olympic Committee and the local tourism industry. TOP partners can use those traditional images associated with certain country or region, while local marketers can use a marketing capabilities of TOP partners to emphasize the connection between the destination and the Olympic Movement.

To prolong the positive effect the Olympics Games had on the tourism industry, local tourism representatives need to keep the existing tourism connections with foreign tour operators, while creating new connections with those who entered the tourism market of the country during the Olympic Games.
In the period following the Games of the Olympiad it is important to consolidate the positions of the Olympic capital and the country on the international tourism market and to maintain increased global recognition of the destination. It is necessary to conduct extensive market researches to determine the effect the Games of the Olympiad had on the tourist image of the country.

Important issue in the Olympic tourism development is the inability of some national travel agencies selected by National Olympic committees to develop diverse tourist routes. This happens generally due to a lack of working experience in the country where the Games of the Olympiad are held. To change this situation it is important to expand the cooperation of local receptive tour operators with national tour operators who organize trips to the Olympics Games.

**Results:** Tourism legacy of the Games of the Olympiad is a multifaceted and diversified phenomenon. It promotes not only the city, which hosted the Games, but also the region and the country. Therefore, the organizers of the Games of the Olympiad should plan their activities basing on well-planned tourism development strategy.

**Literature**
INTEGRATION OF THE OLYMPIC EDUCATION INTO SYSTEM OF ESTABLISHMENTS OF A SPORTS ORIENTATION

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There is a great problem of loss by the Olympic movement of the firm traditions, basic principles. In our research, we examine «smiths of staff» of all sportsmen, even the Olympic champions. Sport school and Olympic college are those educational structures where the person of the sportsman is created.

The objective of our research was study of young sportsmen relations to the Olympic movement and revealing of knowledge level in the Olympic education. We solve three interconnected problems: 1) to reveal knowledge level of young sportsmen in the Olympic movement. 2) to define motivation interest and requirement of young sportsmen to development of the Olympic knowledge. 3) to develop system of pedagogical actions for increasing of level of the Olympic education youth sports.

Organization of research.

The research consisted of two stages: questioning where sportsmen were offered to answer questions on their relation to the Olympic Movement, about coach educational work; and test of the Olympic Movement knowledge. We were tested 100 sportsmen in sport school and sport college in two sports: sports gymnastics and judo, various sports qualification at the age from 9 till 18 years. The follow analysis has allowed understanding how the Olympic education of young sportsmen was constructed, what do they think of the Olympic principles.

Following the results of test we had been received outcome - 51 %. It means, that sportsmen have answered correctly only half of questions of the test that is bad result, considering easy level of test. The half of respondents - 58 % do not know a name of the person who has revived Olympic Games - Pierre de Coubertin, it is very sadly. A similar situation was with a question about place of the first modern Olympic Games. All respondents have correctly answered only one question "What year the Olympic Games in Sochi will be?" But now it is difficult to find the person in our country, who does not know it. In whole, the test has allowed to reveal bad situation with knowledge about Olympic movement of our young sportsmen. During research it was revealed that 62 % interrogated never heard about the Olympic charter, though it is the basic document in the Olympic movement. It is the sports constitution and more than half of young sportsmen, interrogated by us, do not know about its existence.

It is very sadly, but clear linear dependence between increase of level of sports skill and neglect the Olympic principles is traced. Sportsmen start to ignore any moral, ethical sport aspects, and simply try to become «Faster, Higher, Stronger» in any ways. The same with the interest to the Olympic movement: only 7 % of representatives of youth rating have answered that it is absolutely not interesting to them, to study the Olympic movement, and to the senior rating this figure increased to 52 %. That is, it is primary at children there is an aspiration to
the Olympic education, in most cases they support the Olympic principles, but all it is lost, from weak attention to this problem. After all, judging by the questioning results, at 36 % of respondents the coach never told about the Olympic games on training, and at 60 % it was some times for all time of training, that speaks about very weak development of the Olympic movement in our sports departments.

<table>
<thead>
<tr>
<th>How often coach tells you about the Olympic games?</th>
<th>never</th>
<th>some times</th>
<th>every month</th>
<th>every training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>36,00%</td>
<td>60,00%</td>
<td>4,00%</td>
<td>0,00%</td>
</tr>
</tbody>
</table>

We had been interrogated sportsmen from sport school where the Olympic education is absent, and Olympic college where there are preconditions of its integration. The comparative analysis of the student opinions trained in sport school and college has confirmed that sportsmen in college, had better knowledge of the Olympic movement. Whether on a question «If class hours or any other actions devoted to the Olympic games are spent at you?» 84 % of pupils-sportsmen of college have answered positively against 18 % of pupils-sportsmen of sport school.

But, there are also negative sides in education of sportsmen in olympic college. So, only 16 % have answered that the victory at any cost is absolutely unacceptable for them. In sport school 40 % of young sportsmen have a same opinion.

<table>
<thead>
<tr>
<th>What do you think of a victory at any cost?</th>
<th>sport school</th>
<th>sport school</th>
<th>olympic college</th>
<th>olympic college</th>
</tr>
</thead>
<tbody>
<tr>
<td>impossible for me</td>
<td>39,50 %</td>
<td>30</td>
<td>16,70%</td>
<td>4</td>
</tr>
<tr>
<td>probably in extreme case</td>
<td>55,30 %</td>
<td>42</td>
<td>50,00%</td>
<td>12</td>
</tr>
<tr>
<td>often use tricks</td>
<td>2,60%</td>
<td>2</td>
<td>16,70%</td>
<td>4</td>
</tr>
<tr>
<td>always use tricks to win</td>
<td>2,60%</td>
<td>2</td>
<td>16,70%</td>
<td>4</td>
</tr>
</tbody>
</table>

Probably, the reason of these results is the fact that for olympic college pupils sports activity leaves on the foreground, eclipsing itself all other, including educational activity. If we not impart to children principles of fair play, then at advanced age it will be difficult to change something.

What turns out as a result? The Olympic education practically is absent in our sports department. And it is the serious problem. With time, this absence of the Olympic Movement understanding will be shown by sportsmen more and more. Olympic colleges can become one of the best tools in the decision of this problem. In them the base of the Olympic education is already put. But, unfortunately, it is very imperfectly, also demands reforming in conformity with a current situation and modern requirements. Olympic colleges cover only a part of sportsmen; therefore a priority is introduction of the Olympic education in training process in
other sports departments. Coaches should not only train, but also bring up the pupils.

**Conclusions**

What conclusions we can make? It is required to develop and introduce the project of the Olympic education in structure of sports departments. Because there is a need to increase knowledge level of young sportsmen in the sphere of the Olympic movement. It is necessary to increase motivation and interest in sportsmen to this subject. At present, unfortunately, level of the Olympic education of young sportsmen is very low that, in the future, can lead to bad consequences. It is necessary to transfer our experience of the Olympic education stored in the years from comprehensive schools on sports departments.
**Introduction:** Last decades youth sports is given more and more attention in the world. In programs of the Games of the Olympiad and the Olympic winter games there are the changes directed on inclusions of sports in which young men are engaged mainly. All over the world regional and world complex international competitions are held. The most representative of them -the European and Australian Youth Olympic festivals (have been held since 1991 and 2001 accordingly), the World youth games of 1998, the Asian youth games of 2009.

In 2010 the first summer youth Olympic Games were held in Singapore. 3600 young athletes from 204 countries took part in the competition which became very important and significant event for the International Olympic Movement.

In this connection, a necessity of thorough analysis of social-pedagogical aspects of Youth Olympic Games is obvious.

The purpose of our research is to analyze the Youth Olympic Games as an international complex sport event.

**Tasks:**
1. To reveal social-pedagogical aspects of the Youth Olympic Games;
2. To carry out the comparative analysis of quantity of the participants applying for one complete set of awards on the Youth Olympic Games with the given indicator at other complex international competitions.

**Results:** Distinctive feature of the Youth Olympic Games was restriction of structure of delegation from each country. Irrespective of quantity of the sportmen who have fulfilled qualifying requirements, the delegation could include no more than 70 sportmen in individual sports and two teams in command game sports. The quantity of officials equaled 30 %. Also certain quotas were established on sports and because of this in judo, artistic gymnastic, trampoline, equestrian, table tennis, sailing, diving, modern pentathlon, archery and triathlon NOC could declare only one young man and one girl as participants. The given restriction doesn't allow one Olympic committee to be presented in all sports that gives potential possibility for bigger quantity of the countries to take part in competitions and to win medals.

The program of the Youth Olympic Games was the same as at the coming Games of XXX Olympiad in London 2012 with certain small changes. 201 complete set of awards in 26 sports has been played.

At Youth Olympic Games competitions between mixed team (boys and girls) were held as well as the competition between team consist of participants from different countries. That type of competition makes cooperation between athletes from different countries much better.

The Youth Olympic Games include two main programs: Sports Competitions and Cultural and Educational Program. CEP is the part of the YOG
which is in charge of engaging young athletes in world of Olympic Values, healthy lifestyle and social civil responsibility. CEP includes seven different formats.

The program also includes conversations with the Olympic champions and interactive exhibitions, and that is very important, is a universal remedy of a cultural exchange between young men of different nationalities. Cultural-educational program has been presented in seven various formats.

On the diagram № 1 comparison of a parity of quantity of participants to quantity of played complete sets of awards at the basic international complex competitions among girls and young men is shown.

Some regional actions have a low parity of quantity of participants to quantity of played medals as representatives take part in them concerning a small amount of the countries, at a considerable quantity of played medals (~178 and 90). That situation doesn't extend on the European Youth Olympic festivals on which a small amount of medals (79 – 109) is played rather.

At comparison of the given indicator with the Olympic Games (26,7 – an average index), the big difference in values is visible. Distinction with Games of XXIX Olympiad in Beijing (36,4) is especially great.

Low level of the given indicator says that a considerable quantity of sportsmen will receive medals. A medal gain at so large competitions as the huge stimulus to the further trainings and continuation of sports career can give Youth Olympic Games to young sportsmen. Thus, representatives of 97 countries have won medals on Youth Olympic Games, representatives of 56 countries have received gold awards. For some countries Youth Olympic Games is a unique chance for their representatives to win the Olympic medals. Undoubtedly, given fact will promote the further development of physical education and sports in these countries, especially in the field of youth sports.

Besides sportsmen, the young ambassadors representing 30 countries-participants and whose goal was distribution and propagation of ideas of Youth Olympic Games in their countries took part in the Games. Young journalists interviewed athletes and leaders of the International Olympic Movement. Within the framework of the program "Friends" of school of Singapore (country-organizer) have established connection with two schools from the countries-participants for an exchange of various information. The Singapore students took
active part in organization of cultural village in which stands of all countries-participants are presented.

Conclusions: Taking into account the above-stated it is possible to make a conclusion that Youth Olympic Games were integrated into all areas of a modern youth society, having given chance to all young men and girls to join the Games.
Great Britain National Team Participation in the Games of the Olympiad in the End of the XX – Beginning of the XXI Century

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Introduction: The purpose of this research is the analysis of the participation of UK athletes in Olympiads starting from the end of XX century to the dawn of XXI century.

Then the task has been set to explain the following phenomena:

At present the International Sport and Olympic Movements are in anticipation of the forthcoming XXX Olympic Games that would be held in London in 2012. For the third time London was elected the capital of the Olympic Games as London has already hosted the Games of IV Olympiad in 1908 and XIV Olympiad in 1948. The attempt to analyze the participation of UK athletes in Olympic Games in the end of XX century and on the dawn of XXI century is made in the present study.

Methods: theoretical analysis and generalization, analysis of literature and periodic press;

Results: The United Kingdom is one of a few countries participating in the Olympic Movement with the athletes who took part in all Olympiads and moreover these athletes have never left the Olympiads without gold medals. The results of the participation of UK athletes in Olympic Games are given in Diagram 1 below: The results of the participation of UK athletes in Olympic Games in 1992-2008

Diagram 1

The total number of medals won since 1992 is 140 medals (Gold Medals – 45; Silver Medals – 43; Bronze Medals – 52)

The diagram demonstrates that XXVI Olympiad held in 1996 has shown the
drastic decline in the unofficial team standings. However, this indicator goes up permanently starting from the following Olympiad. The inclusion of London in the fight for the right to host Olympiad of XXI century, undoubtedly, helped to improve the athletic performance.

Diagram with UK unofficial team standings shows that timely measures taken after the fiasco of the XXVI Olympic Games led to better athletic performance and allowed UK athletes join the top ten of Olympic elite teams by the number of won medals.

**Diagram 2**
**UK unofficial team standings**

In XXIX Olympic Games in Beijing (2008) UK national team showed the best results in the history of Olympic Games and won 19 Gold Medals. The results of UK team performance in XXIX Olympiad are given in Table 1 below:

<table>
<thead>
<tr>
<th>Sport discipline</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycling</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Sailing</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Rowing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Swimming</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Athletics</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Canoe and kayak</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Boxing</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Equestrian</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Modern pentathlon</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Teikwando</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Gymnastics</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total number:</strong></td>
<td><strong>19</strong></td>
<td><strong>13</strong></td>
<td><strong>15</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>

The table allows drawing the conclusion that UK athletes have focused on the training in medal bringing sports. 8 gold, 4 silver and 2 bronze medals won in cycling allowed the sportsmen improve the unofficial team standings. The same approach to the training brought the positive results in swimming and rowing competitions.

The athletes like Christopher Hoy, Bradley Wiggins, and Ben Ainslie won a great number of medals in different years and in different sport disciplines that positively effected UK place in the unofficial team standings. The data may be seen in Table 2.
The participation of UK athletes in Olympic Games

<table>
<thead>
<tr>
<th>Athletes</th>
<th>Olympic Games</th>
<th>Sport</th>
<th>Gold</th>
<th>Silver</th>
<th>Bronze</th>
<th>Total number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christopher Hoy</td>
<td>XXVII-XXIX (2000-2008)</td>
<td>Cycling</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Ben Ainslie</td>
<td>XXVI-XXIX (1996-2008)</td>
<td>Sailing</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

The sports results of UK athletes participating in XXIX Olympiad in Beijing (2008) let us make a statement that the athletes continue the systematic and purposeful training, particularly, in medal winning sports, when only one athlete can win several medals (cycling, swimming, sailing, rowing) for the forthcoming Olympic Games to be held in London in 2012.

**Conclusion:** Altogether, the successful performance of UK athletes in boxing, gymnastics and equestrian prove the high potential of the national athletes of the United Kingdom for winning medals in many Olympic sports.

**Literature:**
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