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INDIVIDUALIZATION OF TRAINING IN WRESTLERS

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ABSTRACT

Purpose of work: to develop a system for the individualization of the phased training for wrestlers. The system is directed to the formation, development and perfection of a wrestler's own style for competition. The synthesized system includes managing (coach) and control (athlete) subsystems. The system includes aspects of the particular external environment from two blocks: rules of competitions and scientific knowledge. These two blocks are sufficient for a full determination of the conduct of the system. Next is to describe the intercommunication between managing and guided subsystems; between the external environment and the entire system for the individualization of the phased training. The system shows that a trainer sets the managing of the affecting sportsman on to three directions: block of training activity; block of competition activity; block of extra training and extra competitive activity. *Conclusion:* It should be noted that the most recent rules changes (FILA) have changed the external environment in this system, and produced more challenging requirements for the development of the special endurance.

Key Words: age, wrestling, systems approach, individualization, style of wrestling.

INTRODUCTION

One of main directions for the perfection of a sportsmen's training system is a maximal orientation on an individual wrestler's tendencies, likes, dislikes, and abilities. These are important when choosing a sport specialization; with the development of a whole system, even after many years of training; and the determination of a rational structure for the approach to competition (10, 11). Well known specialists in wrestling assumes (2,3,9,14,16), that one of necessary conditions of successful competition activity on mat is this course of matches and tournaments, which requires the maximization of the individual's physical, psychological and technical-tactic skills and abilities of a wrestler. That is why the process of a wrestler's training shall be built in individualized way on the basis of general regularities of sportsmen's training in Olympic sports (3,4,10,16,17). If all these conditions are fulfilled, then by the stage of preparation to highest achievements, an experienced wrestler already must have an effective individual style of wrestling. Only if, an athlete conducts matches in "own style," will achievement of high international results be possible (2,6,7,8,9,10,11).

The problem of individualization of training has been the subject of much research. However, the works, devoted to wrestling touched, mainly, elite athletes and were of fragmentary character, often did not consider the effect of many years of training, as well as the stages of training (12). With it, the level and content of the research, as a rule, corresponded only to competition activity from that time.

The absence of a single system of knowledge, which unites known regulations of individualization of wrestlers training, substantially reduces possibilities of further research, especially in problems of sport selection and management. That is why the problem of individualization of wrestlers' training should be studied and solved on a systemic level.

This work was conducted within the framework of a combined plan of scientific and research in the field of physical culture and sports of Ukraine for 2011-2015. The scope of that work was the Individualization of the training process of qualified combat athletes, while this paper only considers the development of a system of individualization of training for wrestlers.

METHODS

The study involved 92 wrestlers. All athletes were wrestling for more than five years. All athletes at this stage of training have had regular medical examinations and were ready to conduct the study. In this paper we used the

methods: analysis and compilation of scientific and methodological literature and internet resources, pedagogical monitoring, questioning, analysis of competitive activity, testing of physical development, system analysis, system synthesis, and mathematical statistics.

Analysis of competitive activities included the results of wrestlers activities at the Olympic Games in Atlanta (1996), Sydney (2000) and Athens (2004) and interviews with leading trainers, experts, judges, and academics. We also analyzed all of the wrestlers who took the first five places (76 matches) at the games in the Beijing Olympics (2008). Anthropometric physical and psychologically characteristics in champions of each wrestling style were evaluated. The control tests of model characteristics of physical fitness of wrestlers was defined. The relationship between the results of these tests and model-governmental performance requirements were evaluated.

RESULTS AND DISCUSSION

When building the multi-year training system for wrestlers it is necessary to know the model characteristics of a champion's abilities. However, as results of research, conducted by advanced wrestling specialists, show, that champions can have substantially different combinations of preparedness' features, and these combinations are rather stable (5,6,7). We know numerous groups of wrestlers, which have approximately similar combinations of such characteristics. These specific combinations, ensure successful activity for such a group of wrestlers and the associated wrestling style. In previous works, which were done on the basis of results from competition analysis and expert evaluations by specialists, we stated that every high class sportsman (wrestlers, who took first five places at Olympic Games) can be related to one of seven styles. Using the terminology of the coaches and wrestlers, these are: "paced in hold," "paced at distance," "player," "binder," "highly reliable," "strongman," "full-developed" (6,7). The competitive characteristics of these styles of wrestling are shown in Table 1.

Table 1. Characteristics of competitive activity of typical styles of wrestling.

Styles of wrestling	Realiability of attack, %	Realiability of defense, %	Activity (real attack)·min ⁻¹	Effectiveness of wrestling, points · min ⁻¹	
«strongman»	32	63	1.2	0.6	1.6
«full-developed»	43	66	1.1	0.7	1.3
«highly reliable»	50	80	1.0	0.7	1.6
«player»	36	73	1.4	0.6	1.1
«binder»	63	65	0.9	1.2	2.0
«paced at distance»	55	53	1.4	1.1	1.8
«paced in hold»	53	66	1.4	1.3	2.3

Using these same approaches were identified model characteristics of each of the groups of wrestlers belonging to the selected style (7). The results allowed us to go to the development of individualization phased training in wrestling, aimed at identifying the formation, development and improvement of the particular style. Development of such system in a necessary condition for the optimal management of sportsman's training in Olympic sport (3,9,10,11,14).

A systemic approach in research implies the studying of an object of interest as a system. In a gnoseological aspect – it is the construction (analysis-synthesis) of a system for the studied object (4,10). In our case the studied object – is a stage-by-stage training system for high class freestyle wrestlers, while integrating (system-formation) and additional parameter, the individualization of training, to the system. The conception of "system" takes the highest place in the hierarchy of systemic approach methodology. That is why the next step of analysis requires choosing and specifying the "system" in compliance with the research problem (4,10).

From numerous definitions of this conception, the formulation of Anokhin is the closest to our direction of research: "System is such complex of selectively involved components, whose interaction and interrelation acquire character of inter-assistance of components for obtaining of focused useful result" (1). Further, considering the main principle of systemology (4,10) we can provide the following definition of our system as, a stage-by stage training in free style wrestling within individualized system of periodic training.

Individualized system of periodic training - a collection of the components (components and subsystems) and their interactions in the preparation of elite wrestlers. Includes a manageable mutual assistance appointment system. Additionally, it requires the identification, formation, development and improvement of an individual style within the dynamics of phase training.

According to the general theory of training athletes in Olympic sports (3,8,10,11), the system must provide the required and effective development of the athlete based on readiness from optimal management. Thus, the individualization system of periodic training is a control system consists of the managing subsystem (guiding) and controlled subsystem (to control). Every sub-system (managed and managing) shall include those substantial elements, sub-systems and their interactions, which form a certain unity of actions and activity in the whole. In our case the marked out sub-systems and elements purposefully solve the tasks of individualization of sportsman's training in the process of mutual assistance. The combination of marked out sub-systems, elements and interactions should be as small as possible (but fairly complete within the boundaries of this study) (4,10).

It is useful to present the system of individualization in the form of diagram, shown in Figure 1. External factors can be represented by the two the most significant (for present research) blocks, which mainly determine the functioning of system of individualization:

- block of rules and conditions of competitions;
- block of scientific knowledge, generalized experience of advanced practice of sport activity in free style wrestling.

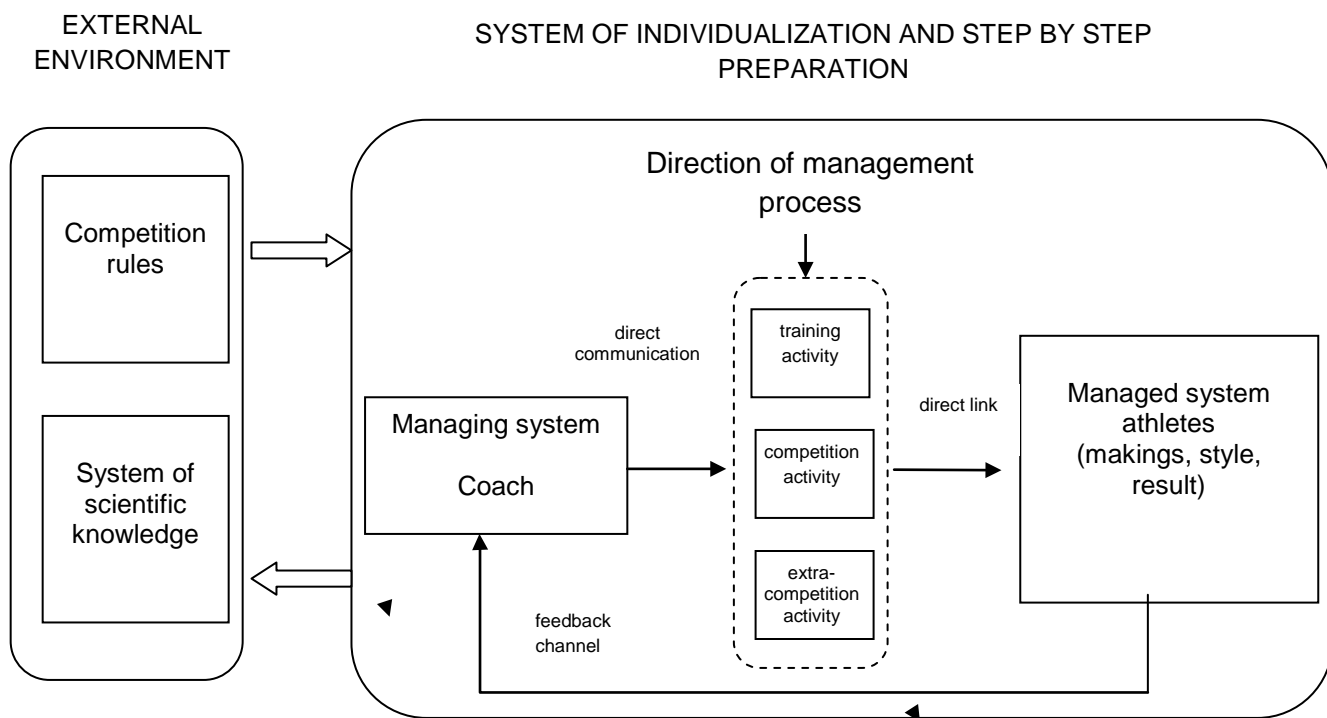


Figure 1. Structural-logical schemes of individualization system of stage-by-stage training of wrestling.

The individualization system itself consists of the managing sub-system (subject of management) – coach and managed sub-system (object of management) – sportsman. Coach, basing on rules of competitions, scientific knowledge and own experience set managing influence by channel of direct communication (DC) on sportsman by three directions, which are presented by three blocks:

- block of training activity (BTA);
- block of competition activity (BCA);
- block of extra-training, extra-competition activity (BETECA).

Through a feedback channel (FBC), the coach receives information about the sportsman: his tendencies and abilities, results of the cycle or stage training, level of wrestling style's formation and development, results of participation in competitions and so on.

On the basis of processing (analysis, synthesis, comparison) all information, decisions are worked out and appropriate corrections are introduced by all directions of management process (programs, methodic and means of training activity, competition activity, extra-training and extra-competition activity). External factors and the system of individualization can interact rather intensively, along with the dynamics of stage-by-stage training (see Figure 1). For example, recent changes of competition rules set new, more strict requirements for the level of special endurance.

In particular, competitions in each weight category before are carried out 4-5 hours before final; during this time a sportsman conducts 4-5 matches, with rest interval between third and fourth, fourth and fifth matches can be only 15-20 minutes. Now, energy supply for competition activity is characterized by a particular dominance of the anaerobic, glycolytic component. Additionally, oxygen debt significantly increases in each match. Such changes resulted in correction of management process from all directions. For example in the block of training activity they started to pay more attention to development of special endurance and associated qualities, and changed programs and methods of training. In the block of extra-competition there is a new emphasis shifted to searching for means of more effective special active rest recreation and its stimulation, searching for new optimal diets and supplements, new methods for the reduction of the wrestlers' weight, etc.

In the block of competition activity match tactics changed, calling for a still more rational use and saving of energy, both in the dynamics of a match and in the competition in general. In its turn the system of individualization is influenced by external factors and the International Federation of Wrestling (FILA) is constantly making changes and adjustments to the terms and conditions of the competition.

The block of scientific knowledge (external factors) determines and sets all organization and structure of training, competition, extra-training and extra-competition activity, but its also is replenished with new knowledge, obtained from the athlete's training practice and competition.

CONCLUSIONS AND ADVICE FOR ATHLETES AND COACHES

We have developed a system of individualization of stage-by-stage training in free style wrestling, which includes managing (coach) and managed (sportsman) sub-systems. For this system external factors have been determined, which consists of two blocks: rules of competitions and scientific knowledge, which determine behavior of system sufficiently completely. We have marked out the main directions of management influences: training activity; competition activity; extra-training and extra-competition activities. Interactions both between managing and managed sub-systems and between external factors and all system of individualization of stage-by-stage training have also been stated. The prospects of further research imply development of programs of individualization of wrestlers' training for every fighting style.

REFERENCES

1. Anokhin P.K. Essays on physiology of the functional systems. Moscow: Medicine; 1975.
2. Arziutov G.N. Features of formation of individual style in combat sports. *Physical Education of the Students of Creative Profession*, 11, 50–56, 1999.
3. Bojko V.F., Dan'ko G.V. Physical training of fighters. Kiev: Olympic Literature; 2004.
4. Kraemer W., Fleck S., Deshenes M. *Exercise Physiology: Integrating Theory and Application*. Baltimore: Lippincott Williams & Wilkins; 2011.
5. Latyshev S.V., Korobeynikov G.V. Approach of the systems to problem of individualization of training of fighters. *Physical Education of the Students of Creative Profession*, 5, 65–67, 2013.
6. Latyshev N.V., Latyshev S.V., Gavrilin V.A. Analysis of competitive activity finalists Games of the XXIX Olympiad in Beijing in freestyle wrestling. *Theory and methods of physical education*, 1, 173–180, 2008.
7. Latyshev S.V. Styles confrontation in modern wrestling. *Physical education, sport and culture of health in modern society*, 1(13), 69–73, 2011.
8. Latyshev S.V. Quantitative evaluation of the characteristics of successful conduct of the fight for athletes with different styles of confrontation in wrestling. *Young sport science of Ukraine*, 1(15), 168–174, 2011.

9. Mirzaei B., Akbar N. Skill Profile of Elite Iranian Greco-Roman Wrestlers. *World Journal of Sport Sciences*, 1, 08–11; 2008.
10. Piloian R.A. Individualization of training of sportsmen in the types of single combats. Moscow, 1985.
11. Platonov V.N. General theory and its practical applications. The system of preparation of sportsmen in Olympic sport. Kiev: Olympic Literature; 2004.
12. Kraemer W., Fleck S., Deshenes M. *Exercise Physiology: Integrating Theory and Application*. Baltimore: Lippincott Williams & Wilkins; 2011.
13. Sadovskij V.N. Changing of paradigms of system thought. *System Research*; 1996.
14. Sandberg Emma, Bell Nathan Eds: *Coaching Youth Wrestling*. Illinois: Human Kinetics; 2007.
15. Ryan T., Sampson J. *Elite Wrestling*. New York: McGraw–Hill; 2006.
16. Utter A., Kraemer W., Fry A., Rubin M. Physiological and performance responses to tournament wrestling. *Medicine & Science in Sports & Exercise*, 33(8), 1367-1378, 2001.
17. Wilmore J., Costill D., Kenney L. *Physiology of Sport and Exercise*. Champaign, Illinois: Human Kinetics; 2007.