EFFECTIVENESS OF COMPETITIVE ACTIVITY OF HIGH CLASS HOCKEY PLAYERS ACCOUNTING A LEVEL OF THEIR SELF-ESTEEM

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Annotation. **Purpose:** study the effect of increasing the level of self-esteem on the efficiency of competitive activity of high class players. **Material:** the study involved sixteen athletes (Atlanta, Moscow region - Continental Hockey League). **Results:** it was found that the application of special training self-esteem increases the level of implementation of technical and tactical action games. Number of goals increased by 8.92%, assists - 21.5%, the total number of shots on goal - to 20.02%. **Conclusions:** it is recommended specialized program correction level of self-esteem from 10 separate studies. Classes have different target setting: habit forming positive attitudes towards themselves, develop skills of active life position, securing high self-esteem. The program is used for two weeks in the preparatory period of training.

**Keywords:** self-esteem, psychological, training, competition, operations, technical, tactical.

Introduction
Problem of sportsmen’s psychological fitness is one of the most urgent among other questions of sportsmen’s training [2, 4, 6, 12-14, 19]. Especially significant sportsmen’s psychological training is on the stage of maximal realization of individual potentials and maintaining of highest sportsmanship (stages, which compose second stage of many years’ training – realization and development of highest sportsmanship) [1, 7, 13, 17, 20].

In specialists’ opinion the reason of it is the fact that at final stages of many years perfection special sport fitness gradually looses its priority that is connected with achieving of optimal form by sportsmen and exhaustion of organism’s functional reserves. The higher is qualification of sportsman, the more difficult to find methods and means of his perfection [3, 11, 15, 16, 18].

At level of highest sportsmanship players’ individual specificities manifest more distinctly that at earlier stages that, in its turn, is proved by researches of many specialists [5, 7-10].

As on to day, we can observe constant increasing or competitiveness at international sport arena in competitions on hockey with puck. This trend results in constant increasing of both physical and mental loads on hockey players that set special requirements to seeking of new technologies of hokey players’ training for competitions.

In this connection researches, oriented on reserves of sportsmen’s psychological fitness are rather urgent. Correction of mental state and personality’s characteristics in training process and competition functioning plays important role in all system of sport training.

The work has been fulfilled in frames of scientific research topic 2.4. “Theoretical-methodic principles and individualization of training process in game kinds of sports”, in compliance with combined plan of SRW in sphere of physical culture and sports for 2011-2015.

**Purpose, tasks of the work, material and methods**
**The purpose of the work** is to analyze influence of increasing of sportsmen’s self-estimation on effectiveness of highly qualified hockey players’ competition functioning.

**The tasks of the research:** determination of effectiveness of introduced program, which was oriented on increasing of sportsmen’s self-estimation, and analysis of influence of increasing of sportsmen’s self-estimation on effectiveness of highly qualified hockey players’ competition functioning.

**The methods of the research:** pedagogic observations and analysis of competition functioning, analysis of special scientific-methodic literature, Internet data; methods of mathematical statistic.

**Results of the research**
For increasing of hockey players self estimation we worked out specialized program, which included ten separate trainings, oriented on correction of self estimation. The trainings had different purposes: from formation positive attitude towards own self to training of skills of active life-position and fixing of high self-estimation. The program was used during two weeks in preparatory period of training. Organization of researches included three relatively independent stages: 1) stating experiment (primary testing of self-estimation and determination of competition functioning’s efficiency; 2) Experiment with introducing of author’s program on self-estimation optimizing (formation of control and experimental groups); 3) Repeated testing (determination of the offered program’s influence on self-estimation and competition functioning).

So, in fig.1 we give data of effectiveness of hokey players’ competition functioning (control and experimental groups) after experiment. It should be noted that experimental group’s hockey players had higher self estimation than in control group after experiment.

By results of regular championship 2013-2014 experimental group hockey players had higher quantity of thrown pucks in comparison with previous season (2012-2013), and with control group players.

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Fig. 1. Pucks, thrown by hockey players of control and experimental groups by results of previous (2012-2013) season and season of 2013-2014 in percents from model indicators – * - differences are statistically confident, p<0.05; Kgb – control group before experiment; Kga – control group after experiment; Egb – experimental group before experiment; Ega – experimental group after experiment.

In fig. 1 we can see that by results of previous season experimental group hockey players had level of thrown pucks, which exceeded mean model indicator for highly qualified sportsman by 8.02 %. Analysis of this technical-tactic action by results of 2013-2014 season showed confident (p<0.05) increment in experimental group - 16.98 %, i.e. actually two times higher. Results of control group hockey players by this indicator practically did not change.

Also we can speak about increasing of indicator of efficient passes in experimental group (see fig.2.).

Fig. 2. Efficient passes, fulfilled by sportsmen of control and experimental groups by results of previous (2012-2013) season and season 2013-2014, in percents from model indicators – * - differences are statistically confident, p<0.05; Kgb – control group before experiment; Kga – control group after experiment; Egb – experimental group before experiment; Ega – experimental group after experiment.

Analysis of this indicator in season 2013-2014 showed significant increment of this indicator in experimental group – by 9.14 %. The changes were statistically confident (p<0.05).

In fig. 2 we can see that in control group there is positive change of efficient passes’ indicator (-13.9 % in previous and 7.61 % in the following season) but, in contrast to experimental group these differences were not statistically confident. We found confident (p<0.05) positive changes in experimental group also by indicator of gained scores in match.

So, quantity of scores, gained by experimental group sportsmen, by result of season, preceding experiment, was 27.67 %, i.e. below middle. But be results of season, which was after experiment, showed significant increment of gained scores - 13.06 %.
Fig. 3. Scores, gained by sportsmen of control and experimental groups by results of previous (2012-2013) season and season 2013-2014, in percents from model indicators – * - differences are statistically confident, p<0.05; Kgb – control group before experiment; Kga – control group after experiment; Egb – experimental group before experiment; Ega – experimental group after experiment.

Thrown pucks, efficient passes and gained scores are most significant technical tactic actions of hockey player in match. Just on the base of analysis of these indicators sportsmen’s effectiveness in attack is evaluated.

The data, received by us, permit to speak about positive influence of the offered program on correction of self-estimation on elvel of attacking actions in match.

The higher was hockey player’s self-estimation, the more throws he made. As a rule, with low self-estimation, sportsmen rarely are initiative; they are more cautious. Of course, throw of puck shall be realized only in cases when this throw results in goal or sharpening of situation, but now we mean other. Hockey players without self confidence often can miss convenient for throw moment, trying to choose other variant for continuation of attack.

Analyzing data, given in fig. 4, we can affirm that increased self-estimation in experimental group positively influenced on quantity of puck throws.

If before specialized program quantity of throws in experimental group was lower by 4.81 % from mean standard, then, after its application total quantity of throw exceeded mean standard by 14.94 %. These changes are statistically confident (p<0.05). Sportsmen became to throw pucks oftener and it resulted in improvement of efficiency. Thus, quantitative indicator transformed in qualitative.

Fig. 4. Total quantity of throws to goals fulfilled by control and experimental groups by results of previous (2012-2013) season and season 2013-2014, in percents from model indicators – * - differences are statistically confident, p<0.05; Kgb – control group before experiment; Kga – control group after experiment; Egb – experimental group before experiment; Ega – experimental group after experiment.
In fig. 5 we present summarizing indicator of model deviation, which characterized in general effectiveness of hockey players’ competition functioning. For example, in fig. 5 we can see that summarizing indicator of model deviation in experimental group was confidently (p<0.05) higher than in control group.

**Fig. 5. Summarizing indicator of model deviation in control and experimental groups by results of previous (2012-2013) season and seasona 2013-2014, in percents from model indicators – * - differences are statistically confident, p<0.05; Kgb – control group before experiment; Kga – control group after experiment; Egb – experimental group before experiment; Ega – experimental group after experiment.**

Having negative balance of percent deviation from model indicators before application of program (- 9.35 %), sportsmen of experimental group in after-experiment season exceeded mean level for highly qualified sportsmen by 5.9 %.

**Conclusions:**
1. Analysis of highly qualified hockey players’ competition functioning permitted to determine positive influence of increased self-estimation of highly qualified hockey players on effectiveness of their competition functioning in match.
2. Analysis of hockey players’ performances in two seasons of Continental hockey league, one of which preceded experiment and the other followed after it, we determined that sportsmen had confidently higher level of technical tactic actions’ realization than sportsmen of control group.
3. Quantity of thrown pucks increased by 8.96 % in experimental group, efficient passes – by 28.88 %, gained scores – by 40.73 %, throws in goals of adversary – by 19.75 %, realization of throws in goal – by – 19.29 %.

**References:**
10. Keller V.S. *Sorevnovatel’naja deiatel’nost’ v sisteme sportivnoy podgotovki* [Competitive activity in the athletic training], *Sovremennaya sistema sportivnoj podgotovki* [The modern system of sports training], Moscow, 1995, pp. 41–50.


16. Savenkov G.I. *Psikhologicheskaia podgotovka sportsmena v sovremennoj sisteme sportivnoj trenirovki* [Psychological preparation of the athlete in the modern system of sports training], Moscow, Physical Culture and Sport, 2006, 96 p.


