

COMPARATIVE ANALYSIS OF INDIVIDUAL PECULIARITIES FOR TENNIS PLAYERS OF DIFFERENT QUALIFICATION

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Annotation. A comparative analysis of indicators that reflect the personality characteristics of athletes of different skills. The study involved 36 athletes aged 14-26 years. Revealed the presence of significant differences in the level of mobility of nervous processes, the forces of braking, the severity indices of extraversion and neuroticism. Quality indicators of attention (concentration and speed of information processing) above highly skilled athletes. Indicators of anxiety (personal, reactive) is also higher in highly skilled athletes. Revealed that the athletes more skill, personality traits modified by the sport. These changes reduce the competitive stress, improving the performance, extend athletic career athletes tennis.

Keywords: athlete, tennis player, individual, peculiarities.

Introduction

In tennis, like in other kinds of sports, victory in competitions depends not only on the level of physical, technical, tactic and functional sportsman's preparedness but, to large extent, on his psychological readiness, his ability to control his actions and behavior in difficult conditions of competition struggle, on opportune choice of correct decision, realization technical-tactic potential, i.e., on individually-psychological and psycho-physiological features of tennis player [4, 6, 11, 12].

At the present stage of sports' development, psychology is not only the mean, ensuring satisfactory realization of the acquired abilities or pre-start correction of trainings' mistakes, but, first of all, it is the science, achievements of which facilitate the most efficient fulfillment of any activity and its planning [1, 2, 10].

Extreme character of sports activity, motivation for achievement of high sport results, orientation on conscious development of own motion abilities, own physical "self", subjective feelings, high level of volition efforts, speed of information's receiving and processing, quickness of mental activity – all these are quite incomplete list of psychological load components, which determines both the level of psychic state and the level of functional response [3, 8, 9].

The knowledge of peculiarities of psychic load's influence on all spheres of sportsman's activity belongs to practical tasks to be solved, the tasks, which are urgent for high level sports, such tasks as elimination of psychic load's influence on special sportsman's motion abilities (coordination, endurance, strength and so on) in different conditions of sports activity [5, 6]; restoration of workability and sportsmen's functional level before and after great training and competition loads; determination and formation of individual tolerance to stress factors in specific conditions of training and competition activity; construction of psychic sports records of professionally important qualities, which limit efficiency and successfulness of training and competition activity; revelation of conditions and mechanisms of psychological adapting to extreme conditions of sports activity and a number of other tasks [3, 4, 7].

That is why it is objectively necessary to study the ways of mobilization of sportsman's hidden resources in order to improve his professional preparedness.

The importance and significance of researches of psychological training's peculiarities in tennis are conditioned by the factors, which are determined by specificity of this kind of sports and competition activity, as well as by individual-personal features of tennis players.

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Purpose, tasks of the work, material and methods

The purpose of the work is revelation of individual-typological and personal features of tennis players of different qualification.

The methods of the research:

1. Theoretical analysis and generalization of the data, obtained from special literature, and the experience of advanced practice;

2. Questioning;

3. Pedagogical finalizing experiment with application of sports-pedagogical and psycho-diagnostic methods;

4. Methods of mathematical statistics.

Organization of the research.

36 sportsmen-tennis players took part in the research. They were on different stages of many years sports perfection (masters of sports, candidate masters of sports, sportsmen of the first grade).

Results of the researches

By a number of indicators masters of sports confidently differ from the less qualified sportsmen. For example, age (and connected with it period of training) of MS and CMS are confidently different: tennis players – masters of sports in average are 5 years older (accordingly their period of training is longer).

The expressiveness of nervous processes power does not differ confidently in the researched groups (see table

1).

Table 1

Expressiveness of indicators of individual-typological characteristics; of age and sports life period of tennis players of different qualification

Age and period of training; individual-typological characteristics		Preparatory period				Value t- Student's criterion
		Tennis players – masters of sports (MS) (MC) n=21		Tennis players – candidates masters of sports (CMS) n=15		
		\bar{x}	S	\bar{x}	S	
1	Age	18, 6	2, 6	13, 7	1, 0	7, 74**
2	Period of training	12, 2	2, 9	5, 9	0, 8	9, 47**
3	Excitation processes power	57, 2	5, 8	59, 4	5, 4	–
4	Inhibition processes power	54, 5	10, 4	47, 6	6, 2	2, 49*
5	Balance of nervous processes	1, 1	0, 3	1, 2	0, 1	–
6	Mobility of nervous processes	63, 7	8, 0	57, 0	8, 4	2, 41*
7	Extraversion	12, 4	2, 8	15, 6	3, 1	3, 15**
8	Neurotism	13, 0	3, 0	10, 7	1, 1	3, 18**

Notes** – $p \leq 0, 01$; * – $p \leq 0, 05$; «←» – $p > 0, 1$

At the same time indicator of inhibition processes power of MS is confidently higher as well as connected with it indicator of nervous processes balance, which is also confidently different, when speaking about MS and CMS. Probably this is the way, how age features of psychic formation manifest themselves – owing to age peculiarities, prevailing of excitation processes over inhibition ones reduces, their equilibrium rises.

The obtained result is supplemented by indicators of extraversion and neurotism, from which it is obvious that MS have confidently higher level of neurotism and lower – the level of extraversion.

Sportsmen of lower qualification also confidently differ from highly qualified sportsmen by a number of indicators, which characterize parameters of attention and determine efficiency of competition activity, such as: concentration and speed of information processing, which requires significant attention (MS's indicators are higher). (see table 2).

Table 2

Indicators of attention characteristics of tennis players of different qualification

Attention characteristics		Preparatory period				Value t- Student's criterion
		Tennis players – masters of sports (MS) n=21		Tennis players – candidates masters of sports (CMS) n=15		
		\bar{x}	S	\bar{x}	S	
1	Accuracy of attention (for 5')	0, 950	0, 04	0, 945	0, 04	–
2	Concentration of attention (for 5')	714	133	536	94	4, 72 **
3	Speed of information processing	1, 229	0, 3	0, 915	0, 2	4, 39**

Notes : ** – $p \leq 0, 01$; «←» – $p > 0, 1$

Besides the above mentioned differences, the sportsmen with lower qualification also confidently differ from highly qualified sportsmen by a number of indicators, which determine efficiency of competition activity, such as: motivation's level and structure, the level of self-evaluation, the level of locus control, the level of personal and reactive anxiety (see table 3).

Table 3

Indicators of psychological characteristics of tennis players of different qualification (competition period)

Psychological characteristics		Competition period				Value t-Student's criterion
		Tennis players – masters of sports (MS) n=21x2=42		Tennis players – candidates masters of sports (CMS) n=15x2=30		
		\bar{x}	S	\bar{x}	S	
1	Self-evaluation ((by Budassy))	0, 5	0, 4	0, 8	0, 0	4, 98 **
2	Personal anxiety	40, 4	5, 7	34, 5	3, 8	5, 31**
3	Reactive anxiety	41, 7	9, 5	34, 7	2, 3	4, 58 **
Control localization indicators						
1	General level of internality	4, 8	1, 6	4, 8	0, 5	-
2	Internality in the sphere of achievements	6, 0	1, 6	6, 0	0, 8	-
3	Internality in the sphere of failures	4, 9	1, 9	4, 4	1, 0	-
4	Internality in the sphere of productive relations	3, 7	1, 0	4, 0	0, 6	-
5	Internality in then sphere of inter personal relations	6, 3	1, 1	5, 6	1, 1	2, 28*
6	Internality in the sphere of health	3, 4	1, 3	3, 8	2, 1	-
Motivation indicators						
1	Concentration on “self”	7, 6	1, 5	8, 6	1, 6	2, 63**
2	Concentration on activity	13, 0	1, 7	11, 6	1, 1	4, 25**
3	Concentration on communication	6, 5	1, 9	6, 9	1, 3	-
4	Motivation to success	10, 5	3, 0	14, 5	3, 1	4, 69**
5	Motivation to avoid failure	13, 4	4, 7	10, 1	2, 5	3, 61**
6	Motivation structure	0, 9	0, 6	1, 6	0, 6	4, 13**
7	Motivational state (by Sopov)	20, 8	3, 0	21, 9	2, 1	1, 84

Notes: ** – $p \leq 0, 01$; * – $p \leq 0, 05$; «-» – $p > 0, 1$

We considered motivation to success of lower qualification tennis players, which is confidently higher, to be the most characteristic difference, while motivation to avoid failure is lower that conditions the structure of motivation, in which achievement of success dominates. Highly qualified tennis players, on the contrary, have prevailing motivation to avoid failure that is not justified psychologically, because these sportsmen, in this case, feel anxiety, have acute response to threatening situations and emotional instability.

At the same time it should be noted that tennis player of lower qualification as well as masters of sports have rather low indicators of motivation level.

Self evaluation of lower qualification sportsmen is also confidently higher. At the same time self-evaluation of MS does not correspond to optimal level and is lower normal minimal and is rather non uniform. From the above said it can be concluded that on the one hand there is insufficient motivation and on the other hand – excessive domination of motivation to success (underestimation of possible failures); inadequately high self-evaluation, which is characteristic for CMS, with the lapse of time (with acquiring of experience of failures, which is felt extremely painfully in these cases) will result in undesirable change both of motivation structure and self-evaluation level. The above said is proved by higher level of personal and reactive anxiety, which are characteristic for highly qualified sportsmen. With it significant orientation on activity, instead of concentration on self, which is more expressed by CMS and sportsmen of 1st grade, is also characteristic for highly qualified sportsmen (see table 3).

In preparatory (training) period greater activity and satisfaction with life and less psychic tiredness, higher coefficient of adapting are characteristic for CMS and 1st grade sportsmen.

The level of psychological preparedness is practically equal of all tested sportsmen.

Summary

Thus, we state that personal qualities of higher qualification sportsmen change under the influence of kind of sports (training or competition activity) that permits to assume adapting of tennis player to tensed sport activity; these changes decrease competition stress and, in their turn, facilitate improvement of results and extension of tennis players' sports career.

Further researches will be directed to determination of psychological characteristics indicators' influence on tennis players of different qualification.

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