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PSYCHOPHYSIOLOGICAL STATE IN ELITE WRESTLERS

The last ten years the personalization of training process of athlete is a main problem in Olympic and professional sport. There are new approaches of psychological, physiological, biochemical and genetics methods of study in sport practical are used.

But one of the informative methods of study among athletes for correction of training process is psychophysiological tests [1]. The psychophysiological methods of study include the psychological and physiological characteristics [2].

The investigation of psychophysiological functions given the important information for building and correction of training process. The psychophysiological functions indicate the abilities of athlete to performance of special skills. Moreover, the psychophysiological state is characterized the level of functional and psychological reserves of organism of athlete. Moreover, the control for psychophysiological state in wrestlers may give the new information to coach about physiological and psychological abilities which may use in the correction of training process [3, 4].

The aim was to study the psychophysiological state of elite wrestlers. 29 Greco-Roman wrestlers (aged 17-23) were examined. The psychophysiological state of wrestlers was studied by complex methods, which include: assessment of decision making time, non-verbal intelligent, anticipation and heart rate variability.

All of athletes were separated on the two groups: with redubs and increase time of decision making. The results are show the reduced time of decision making is related of visual perception and ability to forming of special skills in wrestlers. Simultaneously, wrestlers who have the reduced time of decision making observe the predominance of impulsiveness and non control of movements.

The results of study of verbal intelligent reveal that reduced time of decision making in wrestlers associated with higher volume, speed and quality of perception and information processing of non-verbal information. The study of anticipation was showed the better parameters of accuracy and stability in wrestlers with reduced time of decision making.

The time-domain methods of analysis of cardiac intervals showed that wrestlers who have reduced time of decision making testifies the increasing of strain of autonomic nervous regulation for reason of total effect of the influence on the sinus node of the sympathetic and parasympathetic divisions. The analogy results were obtained for geometric methods of analysis of NN intervals.

Analysis of frequency-domain methods of heart rhythm the found no significant of differences between both groups wrestlers. Obtained results indicate that the spectral analysis in normalized units eliminates the differences between the studied groups of athletes.

The analysis of study established that the improvement of speed of decision

making in wrestlers association with ability of visual perception and forming of special skills with a simultaneous increase of impulsiveness and level of emotional strain. The decision making property determine the capacity of non verbal intelligent to speed and quality information procession in wrestlers. Moreover, the better level of anticipation was observed in wrestlers with high speed of decision making. These it is accompanied with balance between processes of arousal and inhibition. A high speed of decision-making requires a greater strain in the autonomic regulation of the heart rate.

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