The improvement of the special preparation process of the cyclists in the simulating experiment

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Introduction
Contemporary training in the cyclic kinds of sport is distinguished by large amounts of the training activity done, by the increase of its duration and appropriate high physical and psychological load. Examination and analysis of scientific and research literature (Edmund R. Burke, 1996) shows that the annual work amount of the professional cyclists comprises 40-45000 km, and the daily trainings reach up to 6 hours, which brings up several problems for the scientists of the sports field. Particularly during the last 2 decades the specialists have been very interested in questions that are related to the impact of big training loads and to their management process, during which a special attention is paid to the simulation of sports activity (Avanasyan H.M., 2001; Gogunov Y.N., Martyanov B.I., 2000), to the application of several sports equipment in that field, the types of which are considered the biological reciprocal connection, computers and modern measuring equipment.

Methods and organization of the experiment
In the researches a combination of methods has been applied adequate to the posed issues of the experiment: observation, pedagogical testing, psycho-diagnostic and psycho-physiological techniques, criteria of biological reciprocal connection (by Ilyin Y.P., 1983). The pedagogical experiment with a duration of 4.5 months included the following preparation phases: basic (main), pre-emulative and emulative. During the pedagogical experiment training and emulative load was carried out by the experimental group, identical to the control group's load, but unlike the control group, the experimental group carried out the tasks in laboratory conditions by applying directions on the bicycling stand.

Results
Discussing the data, which describe the fulfilment of the model training tasks in the preliminary studies and pedagogical experiment, it can be noted that in the pedagogical experiment in all the proposed regimes, the data of almost all the parameters (which describe the carrying-out of the model training and emulative loads) are authentically high. First of all it is the average speed of the carrying-out of the load, the frequency of heartbeats, pulse value, and the time for overcoming the proposed sections. Before and after the pedagogical experiment a control individual cycling race was conducted from a separate start of 25km. As it is shown in the table 1, the results of the 25 km individual race in the groups are different. Before starting the pedagogical experiment the time (result) of overcoming the distance in the control group was authentically good and was lower than the result of the experimental group only by 69.76 seconds (2.04%). After finishing the pedagogical experiment statistically authentic improvement of the distance overcoming results has been observed in both of the groups. However, if in the control group the result improved by 156.9 seconds, in the experimental one the changes were significant: by 244.6 seconds. After the pedagogical experiment the difference of the time for overcoming the 25km distance between the groups comprised 157.46 seconds (4.82%).

<table>
<thead>
<tr>
<th>Control group</th>
<th>Experimental group</th>
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<tbody>
<tr>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>3421.79 ± 13.06</td>
<td>3264.89 ± 11.07</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
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<tr>
<td>1 – 2</td>
<td>1 – 3</td>
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<td>p ≤ 0.001</td>
<td>p ≤ 0.001</td>
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Table 1: The average time (sec.) for overcoming the 25 km individual race in the studied groups before and after the pedagogical experiment

Discussion/Conclusion
Thus, as a result of a pedagogical experiment the hypothesis of the possibility of practical application of model educational sports trainings, which resembles the whole complex of natural conditions, has been proven not only in the emulative period but also in all the preparation phases.

It has been proved that in the case of simulating educational-sports trainings of various directivity of the cyclist, the main criteria of assessing the productivity of the fulfillment of the proposed loads are considered: the average speed of work of physical cyclic nature, the pedaling frequency and functional data.

References