

## DYNAMICS OF GENERAL PHYSICAL FITNESS OF 15-YEAR-OLD GIRLS CYCLISTS PARTICIPATING IN TRAINING GROUPS

**Boratov Odiljon**

Teacher of the Fergana branch of the Uzbek State University of physical education and sports

E-mail: [baratov0102@gmail.com](mailto:baratov0102@gmail.com)

<https://doi.org/10.5281/zenodo.10030892>

**Abstract:** In this scientific article, the general physical fitness of 15-year-old female cyclists participating in the training group, what changes at the end of the experiment in the experimental and control groups, It is researched how the quality indicators of speed, strength, agility, flexibility, and endurance are formed.

**Keywords:** physical loads, training group, experimental group, control group, physical qualities, endurance, promptness, agility, strength, flexibility indicators of physical development.

### ДИНАМИКА ОБЩЕЙ ФИЗИЧЕСКОЙ ПОДГОТОВЛЕННОСТИ ДЕВОЧЕК-ВЕЛОСИПЕДИСТОК 15 ЛЕТ, УЧАСТВУЮЩИХ В ТРЕНИРОВОЧНЫХ ГРУППАХ

**Аннотация:** В данной научной статье рассмотрена общая физическая подготовленность девочек-велосипедисток 15 лет, участвующих в тренировочной группе, каковы изменения к концу эксперимента в экспериментальной и контрольной группах, каковы показатели физических качеств, скорости, силы, ловкость, гибкость, показатели качества выносливости. Запрещается формировать.

**Ключевые слова:** физические нагрузки, тренировочная группа, экспериментальная группа, контрольная группа, физические качества, выносливость, быстрота, ловкость, сила, гибкость, показатели физического развития.

### INTRODUCTION

At the current stage of development of independent Uzbekistan, great attention is being paid to the activation of the human factor, the issues of developing and improving the system of physical education of the young generation are becoming more important.

Cycling training has now become an exact science. At the current stage of development of cycling, achieving high results is inextricably linked with increasing the efficiency of the training process. The results of the training of highly qualified cyclists in recent years indicate that the increase in the total volume of work during the year is the reason for the increase in sports results. Thus, it was motivated to create a task to search for options for the systematic use of highly effective training tools of various orientations.

### RESULTS AND DISCUSSION

Nowadays, the training processes of many highly qualified coaches in the field of cycling with young athletes have returned high results and raised the honor of our country to higher heights, many of our scientists, with their research on this type of sport, are helping to identify the correct distribution of physical loads given to athletes in the training processes of young people and to eliminate the mistakes of young athletes. The indicators of the formation of the general physical fitness levels were determined through each specified control test.

Practical tests were conducted to determine how the dynamics of general physical development indicators of 15-year-old female cyclists improve during training. The first practical control test, which was initially selected, was a 100 m run, in which the indicators of speed and

physical quality of young cyclists were clearly visible. The experimental group of female cyclists was  $17.0 \pm 1.3$  seconds before the experiment, by the end of the experiment, we can see that their results changed by  $16.5 \pm 0.82$  seconds. The coefficient of variation was ( $V=7.6\%$ ). After the experiment, it was equal to ( $V=4.9\%$ ). The difference between the results before and after the experiment was 0.5 seconds. However, no statistically significant differences were found ( $p < 0.05$ ).

When it was the control group's turn, in the control group experienced by 15-year-old girls cyclists  $17.1 \pm 1.9$  seconds and the follow-up results  $16.8 \pm 1.6$  seconds, and the statistical difference between them was 0.2%. The coefficient of variation of these parameters in the control group changed from 11.1% to 9.5%. There were no statistical differences between the experimental and control groups before the experiment ( $p > 0.05$ ).

Our next practical test, representing the indicator of physical quality of endurance, is 1000 m. are practical tests of distance running. In this experimental group, the indicators before the experiment were  $4.50.0 \pm 0.46$  minutes. The coefficient of variation was ( $V=10.2\%$ ). At the end of the experiment, this indicator was  $4.20.0 \pm 0.26$  minutes. The coefficient of variation ( $V=6.1\%$ ) has improved. During the practical test in the control group, the pre-test results of 15-year-old girls cyclists were  $4.55.0 \pm 0.41$  minutes, coefficient of variation ( $V=9.1\%$ ). After the experiment, this indicator was equal to  $4.40.0 \pm 0.44$  minutes. Coefficient of variation ( $V=10\%$ ), Statistical differences have reliability ( $t=1.21$   $p > 0.05$ ).

**Dynamics of general physical fitness of 15-year-old girls cyclists in experimental and control groups (n=11)**

Norms	Group	TO		TK		Difference	t	P
		X±α	V%	X±α	V%			
100 m. distance running ( minute )	<u>G</u>	<u>17.0±1.3</u>	<u>7.6</u>	<u>16.5±0.82</u>	<u>4.9</u>	<u>0.5</u>	<u>2.74</u>	<u>&lt;0.05</u>
	G	17.1±1.9	11.1	16.8±1.6	9.5	0.2	1.83	>0.05
1000 m. distance running ( minute )	<u>G</u>	<u>4.50.0±0.46</u>	<u>10.2</u>	<u>4.20.0±0.26</u>	<u>6.1</u>	<u>0,30</u>	<u>3.21</u>	<u>&lt;0.005</u>
	G	4.55.0±0.41	9.1	4.40.0±0.44	10	0,15	1.21	>0.05
Track running 4x10 m (seconds )	<u>G</u>	<u>7.2±1.3</u>	<u>18</u>	<u>6.8±0.9</u>	<u>13.2</u>	<u>0.4</u>	<u>2.79</u>	<u>&lt;0.05</u>
	G	7.3±1.9	26.1	7.1±1.7	23.9	0.2	1.80	>0.05
90° pull-up on the low bar ( times )	<u>G</u>	<u>14±1.6</u>	<u>11.4</u>	<u>18±2.1</u>	<u>11.6</u>	<u>4</u>	<u>2.98</u>	<u>&lt;0.05</u>
	G	13±1.5	11.5	15±2.2	14.6	2	1.62	>0.05
Standing long jump ( m, sm)	<u>G</u>	<u>1.70±0.84</u>	<u>49.4</u>	<u>1.90±0.65</u>	<u>34.2</u>	<u>0.20</u>	<u>3.32</u>	<u>&lt;0.05</u>
	G	1.66±0.73	43.9	1.75±0.77	44	0.9	1.23	>0.05

	G							
Bend forward (sm)	G	$\frac{10 \pm 3.4}{9 \pm 3.6}$	$\frac{34}{40}$	$\frac{18.2 \pm 2.4}{13.8 \pm 3.4}$	$\frac{13.1}{24.6}$	$\frac{8.2}{4.8}$	$\frac{4.34}{1.61}$	$\frac{<0.05}{>0.05}$
	G							

We can include running in a practical test that reflects the physical quality of speed. The parameters of the steps of the experimental group in the 4x10 meter running test were  $7.2 \pm 1.3$  (seconds) before the experiment and the coefficient of variation was 18%. After the experiment  $6.8 \pm 0.9$  (seconds), the coefficient of variation was 13.2%. The reliability of statistical differences was equal to ( $p < 0.05$ ). The indicators of the control group before the experiment returned  $7.3 \pm 1.9$  seconds, the coefficient of variation ( $V = 26.1\%$ ). At the end of the experiment, it was observed that the indicators of young cyclists increased by a certain amount.  $7.1 \pm 1.7$  seconds, the coefficient of variation ( $V = 23.9\%$ ) was returned. The reliability of statistical differences between the control group before the experiment and at the end of the experiment was equal to ( $t = 1.80$   $p > 0.05$ ).

The practical exercise of the 90° pull-up on the low bar for girls cyclists helps to determine the quality of strength and to express the general physical fitness indicator. The results of the young girls cyclists showed that the experimental group was  $14 \pm 1.6$  times at the beginning of the experiment, the coefficient of variation ( $V = 11.4\%$ ), and by the end of the experiment, they achieved  $18 \pm 2.1$  times the weight. The coefficient of variation ( $V = 11.6\%$ ) has improved. Young girls cyclists in the control group were weighed  $13 \pm 1.5$  times before the experiment, but at the end of the experiment, this indicator improved ( $15 \pm 2.2$  times). Variation indicators ( $V = 11.5\%$ ;  $V = 14.6\%$ ). During our scientific research, it was found that the results of the experimental group are better than those of the control group. The reliability of statistical differences is equal to ( $p > 0.05$ ).

Practical tests that demonstrate the level of explosive strength in strength quality include the standing long jump. In the standing long jump practical test, the results of the experimental group of young girls cyclists at the beginning of the experiment are equal to  $1.70 \pm 0.84$  m. and the coefficient of variation was ( $V = 49.4\%$ ). By the end of the experiment, this indicator jumped to  $1.90 \pm 0.65$  m and showed a positive result, the coefficient of variation ( $V = 34.2\%$ ) was recorded. The reliability of statistical differences is equal to  $t = 3.32$  ( $p < 0.005$ ). The indicators of young cyclists of the control group were  $1.66 \pm 0.73$  m before the experiment. distance, by the end of the experiment, they jumped to a distance of  $1.75 \pm 0.77$  m. We can see that this indicator increased by 0.9 m by the end of the experiment. If the coefficient of variation was ( $V = 43.9\%$ ) before the experiment, at the end of the experiment, this indicator was ( $V = 44\%$ ).

The following results were obtained using the standing forward bend control test and the evaluation of flexibility quality. The values of young girls cyclists in the experimental group before the experiment were  $10 \pm 3.4$  cm, the coefficient of variation was equal to ( $V = 34\%$ ). By the end of the experiment, the results of girls cyclists changed by  $18.2 \pm 2.4$  cm. The coefficient of variation was ( $V = 13.1\%$ ). The test results from the control group of girls cyclists are as follows. The results before the experiment were equal to  $9 \pm 3.6$  cm. The coefficient of variation was ( $V = 40\%$ ). By the end of the experiment, this index was  $13.8 \pm 3.4$  cm, ( $V = 24.6\%$ ). It is necessary to say the following points about the analytical conclusion of the indicators returned by the mentioned experiment and

control group of girls cyclists: according to it, it was found that there is almost no difference in the indicators before the experiment in the experimental and control groups. At the end of the experiment, it was found that the results of the young female cyclists of the experimental and control groups changed by 3.4 cm.

### CONCLUSION

Thus, the control test designed to assess the general physical fitness of young cyclists is one of the special characteristics of movement during competitions. The use of a specially designed control test in the creation of a system for qualifying girls for the sport of cycling is used to predict and evaluate children's general physical fitness and future technical and tactical capabilities, in addition, the coach provides an opportunity for pedagogues to guide the selected children in their technical activities. In general, comparison of individual indicators in the above-mentioned control test, which represent the level of general physical fitness, with model indicators, allows to effectively organize the training process based on the physical capabilities of children and the general physical fitness level of age characteristics.

### LIST OF REFERENCES

1. O'zbekiston Respublikasi Prezidentining 2017 yil 3 iyundagi PQ-3031-sonli «Jismoniy tarbiya va ommaviy sportni yanada rivojlantirish chora-tadbirlari to'g'risida»gi qarori.
2. O'zbekiston Respublikasining 2015 yil 4 sentabrdagi «Jismoniy tarbiya va sport to'g'risida»gi (yangi tahriri) qonuni. B. 29.
3. O'zbekiston Respublikasi Prezidentining 2021 yil 5 noyabrdagi «Sport ta'limi tizimini tubdan takomillashtirish orqali olimpiya va paralimpiya sport turlari bo'yicha sportchilar zaxirasini shakllantirish sifatini yanada oshirish choratadbirlari to'g'risida»gi PQ-5279 sonli qarori.
4. Abdulaziz Usubjon ugli Khamiddjanov. (2020). The system and content of student selection in belt wrestling. Scientific and Technical Journal of Namangan Institute of Engineering and Technology, 1(4), 316-317.
5. Chernikova Ye.N, Karimov I.I, Xolmurotov O.Yu; Velosport nazariyasi va uslubiyati darslik. T.:«Barkamol fayz media», 2017. –y. 118 bet.
6. Khamidjanov Abdulaziz Usubjon og'li. (2020). Improving the system and content of selection of children for the sport of belt wrestling. Indicators, 8(11), 12-16.
7. Nuriddin Rukhiddinov Goziyev, Abdulaziz Usubjon ugli Khamiddjanov. (2019). The stage of improving the system and content of candidate selection for belt wrestling. Scientific and Technical Journal of Namangan Institute of Engineering and Technology, 1(3), 279-281.
8. Salomov R. Jismoniy tarbiya nazariyasi va uslubiyati. Toshkent 2014. 51-b
9. АУ Хамиджонов. (2020). Белбоғли кураш спорт турига болаларни саралашнинг назарий ва амалий таҳлили. Fan-Sportga, 6(6), 75-77.
10. ФА КЕРИМОВ, АУ ХАМИДЖОНОВ. (2021). Белбоғли курашга болаларни саралашда мусобақа фаолияти ва техник-тактик тайёргарлик кўрсаткичлар самарадорлигини баҳолаш ва назорат қилиш методикаси. Научно-практическая конференция, 1(1), 35-390.
11. ФА КЕРИМОВ, АУ ХАМИДЖОНОВ. (2022). Белбоғли кураш спорт турига 9-14 ёшли болаларни саралашда махсус жисмоний тайёргарлиги кўрсаткичларининг ўрни ва ахамияти. Научно-практическая конференция, 1(1), 62-73.