

The Impact Of Covid-19 On The Development Of High-Performance Sports On The Example Of Underwater Sports

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ABSTRACT:

Goal. To investigate the impact of the new coronavirus infection on the development of underwater sports in Russia and the Krasnoyarsk Territory for the period 2020 - 2021. **Materials and methods.** The study involved men and women specializing in the discipline of underwater sports - swimming in fins. A comparative analysis of the results of the athletes' performance at the Russian Championship, the championship of the Krasnoyarsk Territory for the period 2020 – 2021 was carried out. **Results.** Our comparative analysis of the results of athletes who competed at the Russian Championship showed that during the pandemic there was a slight decline in results at certain distances for women. A comparative analysis of the results of the athletes' performance at the championship of the Krasnoyarsk Territory showed a decline in the results of men at 50% of the distances.

Keywords. underwater sports, training process, coronavirus infection, swimming in fins, distance, competitions

Introduction. The pandemic of the new coronavirus infection (COVID-19), which has swept the whole world in the last few years, has not only had a significant impact on public health, society and the economy as a whole, but also caused damage to the sports calendar. In an effort to stop the spread of the virus, many professional and amateur leagues, clubs, federations on all continents have taken an unprecedented step. Sports events have postponed or suspended their seasons on the advice of WHO in order to avoid large crowds of people. In terms of the impact on sports, the spread of COVID-19 has become the most significant event since the Second World War. The Russian Underwater Sports Federation was no exception, many sports competitions were canceled, and some were postponed for more than six months. This could not but affect the training of athletes and their results.

Goal. To investigate the impact of the new coronavirus infection on the development of underwater sports in Russia and the Krasnoyarsk Territory for the period 2020 – 2021 year.

2. Materials and methods. Our study involved men and women of the highest sports skill, specializing in the discipline of underwater sports - swimming in fins. To assess the state of development of underwater sports during the pandemic (2020-2021), we conducted a comparative analysis of the performance of athletes at the Russian Championship and the championship of the Krasnoyarsk Territory, among men and women.

For comparative analysis, distances related to the crawl, sprint, stayer and underwater disciplines were selected:

- 50 meters swimming in classic fins;
- 100 meters swimming in classic fins;
- 50 meters swimming in fins;
- 100 meters swimming in fins;
- 400 meters swimming in fins;
- 1500 meters swimming in fins;
- 400 meters scuba diving (swimming with a balloon);
- 100 meters scuba diving (swimming with a balloon).

For a comparative analysis, we took the best time that the athletes showed at each distance we chose

3. Results. The analysis of the performance of athletes (men and women) at the Russian Championship and the championship of the Krasnoyarsk Territory in 2020 is presented in Table 1.

Table 1. Analysis of the performance of athletes (men and women) at the Russian Championship and the championship of the Krasnoyarsk Territory in 2020

Year	Distance	Russian Championship		The championship of the region	
		Men	Women	Men	Women
2020	50 classic fins	19,26	22,44	19,90	22,57
	100 classic fins	42,81	48,32	43,47	50,00
	50 fins	15,73	17,86	16,71	19,10
	100 fins	34,42	39,04	36,98	41,29
	400 fins	3.04,03	3.12,29	3.15,78	3.41,72
	1500 fins	12.50,25	13.48,03	13.50,16	15.20,61
	400 diving	2.54,58	3.15,88	3.27,47	3.18,54
	100 diving	33,04	36,03	35,04	39,66

The analysis of the performance of athletes (men and women) at the Russian Championship and the championship of the Krasnoyarsk Territory in 2021 is presented in Table 2.

Table 2. Analysis of the performance of athletes (men and women) at the Russian Championship and the championship of the Krasnoyarsk Territory in 2021

Year	Distance	Russian Championship		The championship of the region	
		Men	Women	Men	Women
2021	50 classic fins	18,64	21,88	20,11	22,21
	100 classic fins	41,40	48,20	42,72	49,01
	50 fins	15,70	17,64	16,50	19,09
	100 fins	35,18	38,21	37,13	40,63
	400 fins	3.00,04	3.10,82	3.18,17	3.31,66
	1500 fins	12.45,28	13.34,03	13.44,99	15.10,04
	400 diving	2.54,05	3.09,35	3.17,53	3.18,27
	100 diving	32,45	36,66	35,73	39,86

Table 1 and Table 2 show that the results (time) for which the athletes - leaders of the Russian Championship swim distances faster than the athletes - leaders of the championship of the Krasnoyarsk Territory. This suggests that the level of training of athletes from other regions of Russia is much higher than in the Krasnoyarsk Territory.

A comparative analysis of the performance of athletes (men and women) at the 2020 and 2021 Russian Championships is presented in Figure 1.

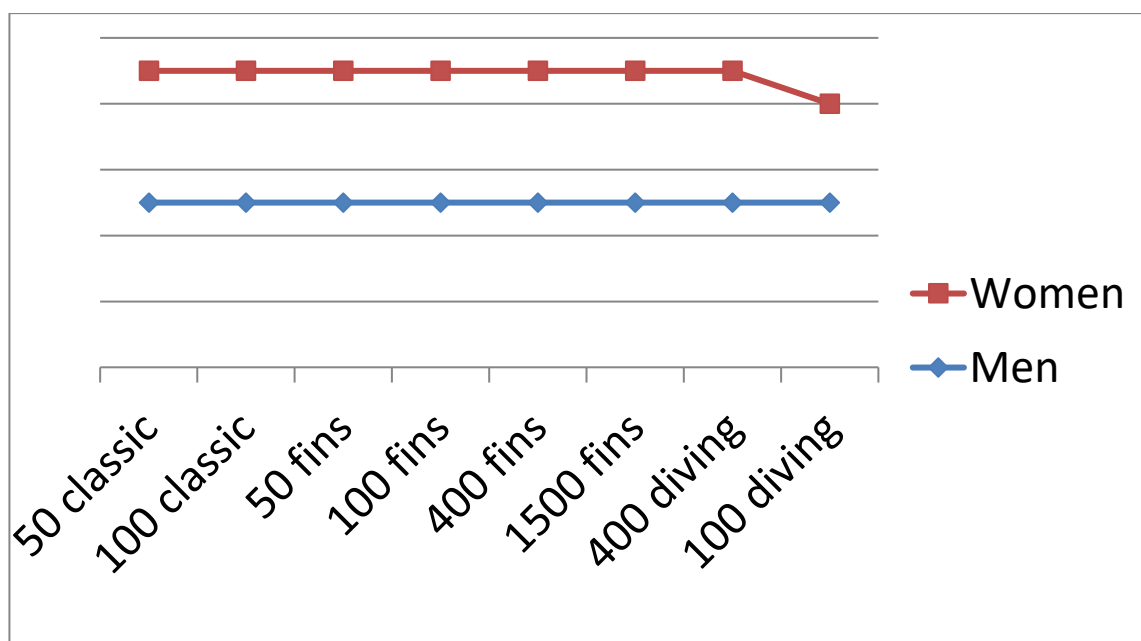


Figure 1. Analysis of the performance of athletes (men and women) at the 2020 and 2021 Russian Championships.

Having conducted a comparative analysis of the performance of athletes at the Russian Championship for 2020 - 2021, we observe an increase in the results of women at all distances. Men have a decline in results only at a distance of 100 meters underwater swimming.

A comparative analysis of the performance of athletes (men and women) at the Championship of the Krasnoyarsk Territory in 2020-2021 is shown in Figure 2.

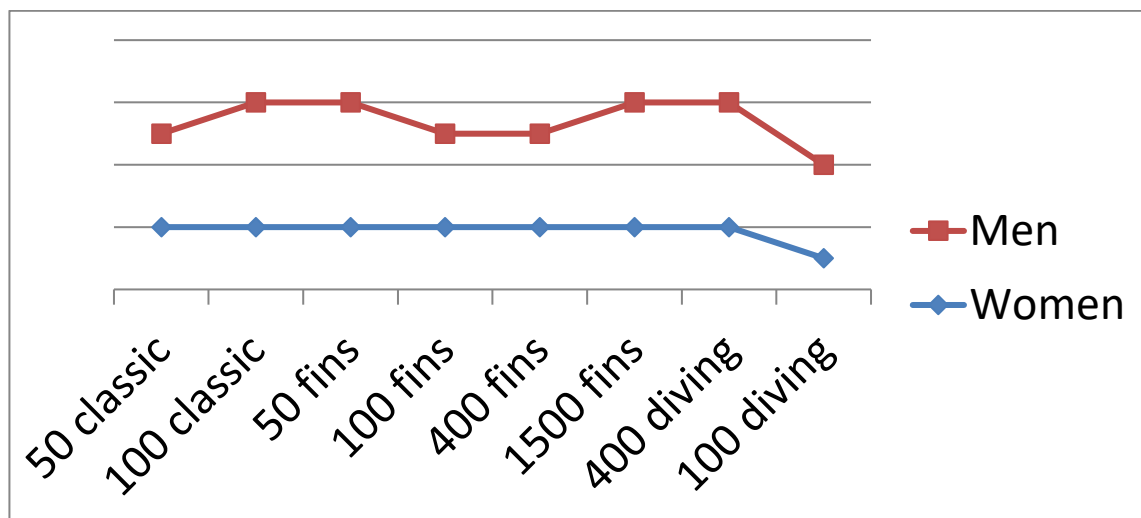


Figure 2. Analysis of the performance of athletes (men and women) at the 2020 and 2021 of the Krasnoyarsk Territory.

Having conducted a comparative analysis of the performance of athletes at the Krasnoyarsk Territory Championship for 2020 - 2021, we observe an increase in the results of women at all distances except 100 meters scuba diving. Men have a decline in results by 50% of distances.

4. Conclusion. With the help of a comparative analysis of time, we were able to establish that the athletes who competed at the Russian Championship have higher results than the athletes of the Krasnoyarsk Territory team. This can be traced in 2020 and 2021. However, if we compare the increase in results separately at the Russian Championship and the Regional Championship, we can draw the following conclusion: at the Russian championship during the pandemic (2020-2021), athletes show an increase in results at all distances except 100 meters scuba diving men. At the championship of the Krasnoyarsk Territory (2020-2021), we observe a significant decline in results for men at 50% of distances. COVID -19 has made significant adjustments to the training of athletes in the regions of Russia. And if the overall picture of the results at the Russian championship shows an increase in 90% of the distances, then in some regions the picture is completely different, which is an example of the Krasnoyarsk Territory.

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