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**Shemchuk V. A.,**  
*candidate of pedagogical sciences, senior researcher*  
**Head of the research department for the development of physical education, special physical training and sports of the research center for problems of physical education, special physical training and sports of the educational and scientific institute of physical culture and sports and health technologies**  
**The National Defence University of Ukraine named after Ivan Cherniakhovskyi (Kyiv)**  
**Pavlov R. V.,**  
*senior teacher of the department of tactical and special physical training of faculty № 3 (Preventive activities)*  
**Kharkiv National University of Internal Affairs**  
**Stepchuk N. V.**  
*Senior teacher of the department of Physical Education, State University «Uzhhorod National University», Uzhhorod, Ukraine*  
**Shelekhova T. V.,**  
*Senior teacher of the department of Physical Education, State University «Uzhhorod National University», Uzhhorod, Ukraine*  
**Pyshka O. P.,**  
*Senior teacher of the department of Physical Education, State University «Uzhhorod National University», Uzhhorod, Ukraine*  
**Susla V. Ya.,**  
*Senior teacher of the department of Physical Education, State University «Uzhhorod National University», Uzhhorod, Ukraine*

#### **DETERMINATION OF THE COMPONENTS OF THE TECHNICAL PREPARATION OF THE FINALISTS (WOMEN) OF THE 2022 WORLD SAMBO CHAMPIONSHIP**

Taking into account the results of monitoring of specialized Internet resources (analysis of scientific and methodological, special and reference literature), the members of the research group established, that the urgent issue of organizing a systematic analytical review of the components of the technical and tactical preparation of female athletes who specialize in combat sports in accordance with their world rating in the chosen type of martial arts is devoted to the insufficient number of scientific studies, this, in turn, emphasizes the relevance and practical component of the chosen direction of scientific research.

The purpose of the study is an analytical and statistical analysis of the technical preparation of highly qualified female athletes who specialize in Sambo wrestling – finalists of the 2022 World Championship (Bishkek, Kyrgyzstan). Research methods: abstraction, measurement, expert evaluation, survey, comparison, observation, etc.

As a result of the theoretical research, the members of the research group conducted an analytical and statistical analysis of the technical readiness of highly qualified athletes (women) (specialization in Sambo wrestling) – finalists of the 2022 World Championship (Bishkek, Kyrgyzstan). We consider it expedient to take the results of the theoretical research into consideration by leading coaches who specialize in Sambo wrestling (sports section). We recommend focusing the attention of the leading coaches on increasing the indicators of activity and efficiency of the competitive actions of female athletes (women who specialize in Sambo wrestling), namely: development and improvement of technical and tactical preparation of fellow fighters (in the rack: focus on improving the technique of undercuts and hooks; on the ground floor: focus on performing pain techniques on the legs after the opponent is fully restrained); reducing the number of warnings for violation of the rules, through a theoretical study of the current Rules (practical training of complex technical and tactical combinations); expanding the arsenal of crown technical actions; development of individual tactical schemes for conducting a competitive fight in the rack and parterre with the use of restraints and pain techniques on the arms and legs; improving indicators of the subsystem of biological control of sportswomen; development of general physical and special physical readiness of wrestlers.

Prospects for further research in the chosen field of scientific intelligence include analytical and statistical analysis of the technical readiness of highly qualified Combat Sambo wrestlers, finalists of the 2022 World Championship (Bishkek, Kyrgyzstan).

**Keywords:** analytics, multi-year training, Sambo wrestling, competitive activity, qualification, comparative analysis, technical readiness, components, women, women's wrestling

**Шемчук Вадим, Павлов Роман, Степчук Надія, Шелехова Тетяна, Пишка Ольга, Сусла Вікторія.**  
**Визначення складників технічної підготовленості фіналісток Чемпіонату світу 2022 року з боротьби самбо.**  
Враховуючи результати моніторингу спеціалізованих Інтернет-ресурсів (аналізу науково-методичної, спеціальної та довідкової літератури), членами науково-дослідної групи встановлено, що актуальним питанням організації системного аналітичного огляду складників технічної та тактичної підготовленості спортсменок, які спеціалізуються в спортивних видах боротьби відповідно до їхнього світового рейтингу у обраному виді одноборств – присвячено недостатню кількість досліджень, це у свою чергу підкреслює актуальність і практичну складову обраного напрямку наукової розвідки.

Головною метою дослідження є аналітико-статистичний аналіз технічної підготовленості самбісток високої кваліфікації, фіналісток Чемпіонату світу 2022 року (м. Бишкек, Киргизстан). Методи дослідження: абстракції, вимірювання, експертного оцінювання, опитування, порівняння, спостереження тощо.

В результаті теоретичного дослідження членами науково-дослідної групи проведено аналітико-статистичний аналіз технічної підготовленості самбісток високої кваліфікації, фіналісток Чемпіонату світу 2022 року (м. Бишкек, Киргизстан). Вважаємо доцільним результати теоретичного дослідження прийняти до уваги провідним тренерам, які спеціалізуються в боротьбі самбо (спортивний розділ). Нами рекомендується зосередити увагу провідних тренерів на підвищенні показників активності та ефективності змагальних дій самбісток, а саме: розвитку та удосконаленні техніко-тактичної підготовленості одноборців (у стійці: зосередити увагу на удосконаленні техніки підсічок та зачепів; у партері: зосередити увагу на виконання больових прийомів на ноги після повного утримання супротивника); зменшення кількості попереджень за порушення правил, шляхом теоретичного вивчення діючих Правил (практичного відпрацювання складних техніко-тактичних комбінацій); розширенню арсеналу коронних технічних дій; розроблення індивідуальних тактичних схем ведення змагальної сутички в стійці та партері із використанням утримань та больових прийомів на руки і ноги; покращенні показників підсистеми біологічного контролю самбісток; розвитку фізичної та спеціальної фізичної підготовленості спортсменок.

Перспективи подальших досліджень у обраному напрямку наукової розвідки передбачають проведення аналітико-статистичного аналізу технічної підготовленості бойових самбістів високої кваліфікації, фіналістів Чемпіонату світу 2022 року (м. Бишкек, Киргизстан).

**Ключові слова:** аналітика, багаторічна підготовка, боротьба самбо, змагальна діяльність, кваліфікація, порівняльний аналіз, технічна підготовленість, складники, жінки, жіноча боротьба

**Articulation of issue and literature route.** The theoretical study was carried out in accordance with the plan of research and development works: research department for the development of physical education, special physical training and sports of the research center for problems of physical education, special physical training and sports of the educational and scientific institute of physical culture and sports and health technologies The National Defence University of Ukraine named after Ivan Cherniakhovskiy; department of Physical Education, State University «Uzhhorod National University»; department of tactical and special physical training of faculty № 3 (Preventive activities) Kharkiv National University of Internal Affairs, as well as specialized departments of higher education institutions with specific study conditions in accordance with agreements on interdepartmental cooperation (initiative scientific project "Sambo Analytics").

**Analysis of literature sources** (1st stage, October-November 2022) allowed to identify the leading scientists: S. Latyshev, V. Shandrygos [1], L. Shakhlin, M. Chichtyakova [2], A. [3], A. Okopny, Yu. Tkach, I. Vovk, A. Cherkasova, O Melnyk [4], S. Stepaniuk, O. Serputka, L. Kharchenko-Baranetska, V. Kovalya, V. Tkachuk [5] – who in their works highlighted the actual issues of building a system of long-term training of female athletes who specialize in single combat.

Interesting in their content and essential characteristics are the works of: V. Andriytsseva [6], D.G. Gurby, J. Guillaume [7], A. Rovniy, K. Mulyk, V. Perebeynos, K. Ananchenko, V. Pasko, V. Perevoznyk, A. Aleksieiev, V. Dzhyim [8], T. Kravchuk, G. Ohar, A. Novikova [9], Yu. Tkach [10] and other scientists and practitioners: N. Boychenko, Yu. Goncharova, I. Zaitseva, O. Morgunov, M. Lyakh, S. Pakulin, A. Pyroga, O. Khatsaiuk – which reveal the peculiarities of the organization of comprehensive support of the system of long-term training of female athletes who specialize in Sambo wrestling (sports types of wrestling).

The works of scientists: M. Latyshev, O. Kvasnytsia, O. Spesyvykh, I. Kvasnytsia [11], V. Shandrygos, M. Latyshev, M. Pervachuk, V. Yaremenko [12], O. Zadorozhna [13], I. Kovalev, S. Ilchenko, S. Zamrozevych-Shadrina, A. Dyachenko, T. Ludovyk, A. Antonyuk [13], S. Ilchenko, O. Solodka, A. Fedorishko, Sh. Kovach, O. Kravchenko, O. Ponomarenko [14], A. Dyachenko, I. Raitarovska [15], O. Khatsaiuk, O. Solodka, V. Yakovliv, Yu. Myronov, O. Kusovska, S. Merdov, Yu. Beloshenko [16] – in which the results of determining the components of the technical and tactical preparedness of highly qualified female athletes who specialize in wrestling sports are presented.

Taking into account the results of monitoring of specialized Internet resources (analysis of scientific and methodological, special and reference literature), the members of the scientific research group established that the urgent issue of organizing a systematic analytical review of the components of the technical and tactical preparedness of female athletes who specialize in wrestling sports in accordance with their world rating in the chosen type of wrestling is devoted to an insufficient number of studies, this in turn emphasizes the relevance and practical a component of the chosen direction of scientific research.

**The purpose of the study is** an analytical and statistical analysis of the technical preparation of highly qualified female Sambo wrestling athletes, finalists of the 2022 World Championship (Bishkek, Kyrgyzstan).

To achieve the goal of scientific research it was planned to solve the following tasks:

- 1) to conduct an analysis of scientific-methodical and special literature in the direction of building a system of long-term training of female athletes who specialize in single combat;
- 2) carry out an analysis of special and reference literature in the direction of comprehensive provision of the system of long-term training of female athletes who specialize in Sambo wrestling;
- 3) carry out an analysis of special and scientific-methodical literature (monitoring of Internet resources) in the direction of determining the components of technical (tactical) preparedness of highly qualified sportswomen who specialize in sports of wrestling.

**Research methods:** abstraction, measurement, expert evaluation, survey, comparison, observation, etc. In addition, we used our own experience of organizing a system of long-term training of athletes who specialize in wrestling (Judo, Sambo wrestling, Greco-Roman wrestling, Freestyle wrestling, etc.).

**Presentation of the main study material.** In the dynamics of the second stage (November 2022 – March 2023) members of the research group (V. Shemchuk, R. Pavlov, N. Stepchuk, T. Shelekhova, O. Pyshka, V. Susla – leading scientists and practitioners in the chosen field of scientific research) an analytical and statistical analysis of the technical preparation of highly qualified female athletes, finalists of the 2022 World Sambo Championship, was carried out (tabl. 1).

Table 1

**Components of technical readiness of highly qualified female athletes, finalists of the 2022 World Sambo Championship (Bishkek, Kyrgyzstan)**

Won a medal	Surname and first name of athletes (country, federation)	The main technical and tactical components						
		4 points	2 points	1 points	maintenance	pain techniques	the number of fights	total time of fights
1	2	3	4	5	6	7	8	9
<b>Weight category up to 48 kg (total number of participants 38)</b>								
Gold medal	TSUNODA Natsumi (JPN)	4	5	3	4	5	5	00:06:53
Silver medal	MENZ Katharina (GER)	3	2	3	1	3	6	00:14:00
Bronze medals	SCUTTO Assunta (ITA)	4	3	2	4	4	5	00:09:47
	ABUZHAKYNOVA Abiba (KAZ)	2	4	-	2	5	5	00:14:00
<b>Total for the weight category up to 48 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>13&gt;2</b>	<b>14&gt;5</b>	<b>8&lt;9</b>	<b>11&gt;1</b>	<b>17&gt;4</b>	<b>21&gt;17</b>	<b>00:44:40&lt;01:12:42</b>
<b>Weight category up to 52 kg (total number of participants 34)</b>								
Gold medal	ABE Uta (JPN)	2	4	1	2	4	5	00:17:50
Silver medal	GILES Chelsie (GBR)	2	2	1	2	4	5	00:16:04
Bronze medals	KRASNIQI Distria (KOS)	3	3	1	5	4	5	00:16:31
	BUCHARD Amandine (FRA)	2	3	2	2	2	5	00:23:03
<b>Total for the weight category up to 52 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>9&gt;5</b>	<b>12&gt;8</b>	<b>5&lt;6</b>	<b>11&gt;3</b>	<b>14&gt;8</b>	<b>20&gt;12</b>	<b>01:03:28&gt;00:54:13</b>
<b>Weight category up to 57 kg (total number of participants 42)</b>								
Gold medal	SILVA Rafaela (BRA)	4	4	1	4	5	5	00:14:07
Silver medal	FUNAKUBO Haruka (JPN)	4	4	-	4	4	5	00:14:15
Bronze medals	KLIMKAIT Jessica (CAN)	4	5	-	4	5	6	00:20:01
	LKHAGVATOGOO Enkhriilen (MGL)	2	3	1	2	4	5	00:25:07
<b>Total for the weight category up to 57 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>14&gt;6</b>	<b>16&gt;0</b>	<b>2&lt;6</b>	<b>14&gt;0</b>	<b>18&gt;9</b>	<b>21&gt;13</b>	<b>01:03:30&gt;00:45:11</b>
<b>Weight category up to 63 kg (total number of participants 41)</b>								
Gold medal	HORIKAWA Megumi (JPN)	3	4	1	3	5	5	00:16:52
Silver medal	BEAUCHEMIN-PINARD Catherine CAN	4	4	-	4	4	5	00:07:54
Bronze medals	DEKETER Manon (FRA)	3	4	1	3	4	5	00:13:01

	TIMO Barbara (POR)	2	4	2	2	5	6	00:22:26
<b>Total for the weight category up to 63 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>12&gt;7</b>	<b>16&gt;5</b>	<b>4&lt;6</b>	<b>12&gt;2</b>	<b>18&gt;2</b>	<b>21&gt;15</b>	<b>01:13:00&gt;</b> <b>01:07:43</b>
<b>Weight category up to 70 kg (total number of participants 44)</b>								
<b>Gold medal</b>	MATIC Barbara (CRO)	4	2	3	4	5	5	00:16:26
<b>Silver medal</b>	CVJETKO Lara (CRO)	1	1	3	1	2	5	00:24:31
<b>Bronze medals</b>	NIIZOE Saki (JPN)	1	3	3	1	5	6	00:22:13
	VAN DIJKE Sanne (NED)	3	2	1	3	4	5	00:23:22
<b>Total for the weight category up to 70 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>9&gt;8</b>	<b>8&gt;7</b>	<b>10&gt;5</b>	<b>9&gt;2</b>	<b>16&gt;4</b>	<b>21&gt;16</b>	<b>01:26:32&gt;</b> <b>00:57:11</b>
<b>Weight category up to 78 kg (total number of participants 33)</b>								
<b>Gold medal</b>	AGUIAR Mayra (BRA)	3	3	2	3	5	5	00:13:47
<b>Silver medal</b>	MA Zhenzhao (CHN)	2	2	4	2	4	5	00:17:39
<b>Bronze medals</b>	LYTVYENENKO Yelyzaveta (UKR)	4	4	-	4	4	5	00:10:24
	PACUT-KLOCZKO Beata (POL)	2	3	1	2	3	5	00:14:34
<b>Total for the weight category up to 78 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>11&gt;9</b>	<b>12&gt;7</b>	<b>7&gt;6</b>	<b>11&gt;1</b>	<b>16&gt;3</b>	<b>20&gt;13</b>	<b>00:56:24&gt;</b> <b>00:43:08</b>
<b>Weight category over 78 kg (total number of participants 29)</b>								
<b>Gold medal</b>	DICKO Romane (FRA)	2	4	-	2	4	4	00:09:25
<b>Silver medal</b>	SOUZA Beatriz (BRA)	3	3	-	3	2	4	00:12:19
<b>Bronze medals</b>	TOMITA Wakaba (JPN)	2	4	-	2	4	5	00:13:35
	TOLOFUA Julia (FRA)	3	4	-	3	4	5	00:20:28
<b>Total for the weight category over 78 kg (<math>\Delta</math> &lt;, &gt;, =):</b>		<b>10=10</b>	<b>15&gt;3</b>	<b>0&lt;3</b>	<b>10&gt;0</b>	<b>14&gt;6</b>	<b>18&gt;14</b>	<b>00:55:47&gt;</b> <b>00:44:01</b>
<p><b>Note:</b> 1) in the process of analytical and statistical processing of the results of the performances of female athletes of the studied category, the official protocols of the "2022 World Championship" were used [17]; 2) identification of the country of the champions and medalists of the "2022 World Cup" was carried out in accordance with international standards; 3) column 3 defines the total number of technical actions rated at 4 points; 4) column 4 defines the total number of technical actions rated at 2 points; 5) column 5 defines the total number of technical actions rated at 1 point; 6) column 6 specifies the total number of maintenance; 7) in column 7, the total number of pain receptions; 8) in column 8, the total number of fights; 9) in column 9, the total time spent by athletes during the competition is determined; 10) the "Total for weight category" column shows a comparative analysis (<math>\Delta</math> &lt;, &gt;, =) of the main technical and tactical components in comparison with similar indicators demonstrated by female Sambo athletes at the 2021 World Championship.</p>								

Athletes from 11 countries took part in the 2022 World Sambo Championship (among women) (athletes from Russia who do not support aggression against Ukraine performed separately under the auspices of FIAS). It should be noted that the national team of Ukraine did not participate in the above-mentioned competitions.

Analyzing the results of the competition (in accordance with the official protocols), the first overall team place was won by the collective team FIAS-1 (4 "gold", 2 "silver" and 1 "bronze" medals), the second place - FIAS-2 (1 "gold", 2 silver" and 2 "bronze" medals) and the third place was won by the national team of Georgia (1 "gold" medal) [17].

Analysis of the most effective technique demonstrated by highly qualified female athletes (finalists of the 2022 Sambo World Championship, regardless of weight categories is provided in Fig. 1).



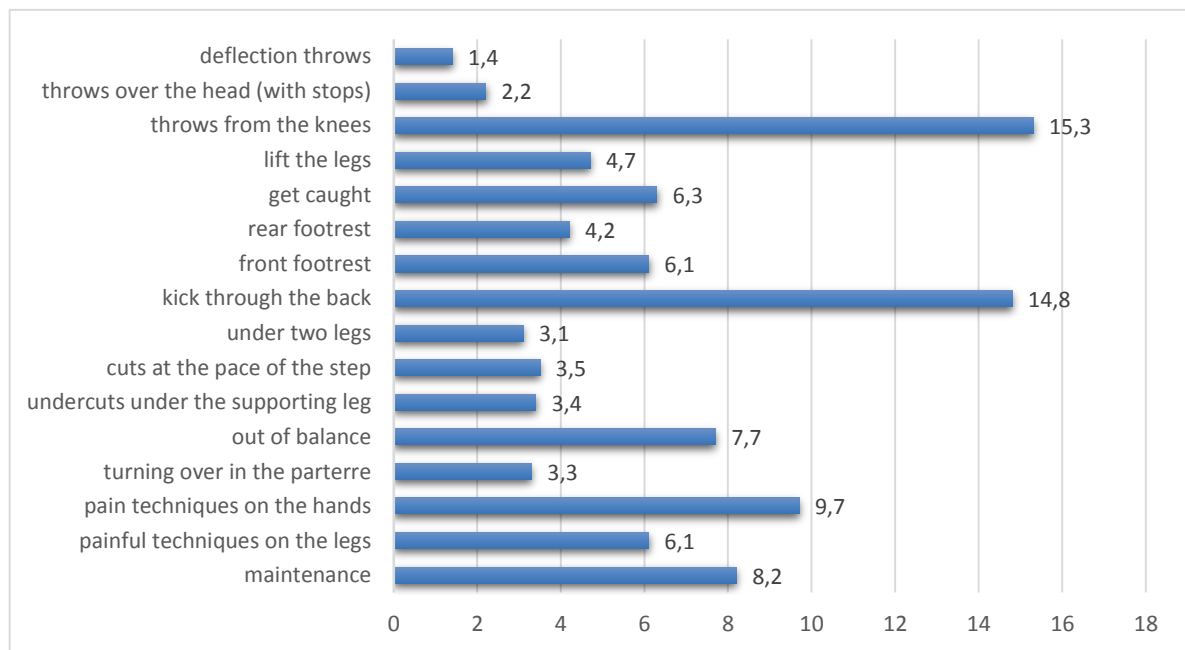


Fig. 1. The most effective technical actions of the researched female athletes of high qualification (%), in the dynamics of their participation in the "2022 World Championship" in Sambo wrestling, regardless of weight categories

According to the monitoring of the video materials, as well as the analysis of the protocols of the above-mentioned competitions of the highest rank, it was established that the most technical athletes are: SILVA Rafaela (BRA, weight category up to 57 kg – won a gold medal); MATIC Barbara (CRO, weight category up to 70 kg – won a gold medal); NIIZOE Saki (JPN, weight category up to 70 kg – won a bronze medal). In turn, the athlete ABUZHAKYNOVA Abiba (KAZ, weight category up to 48 kg; won the bronze award) spent the least amount of time (0.17 seconds) to achieve victory during the competitive fight.

The most fights (6 times on the wrestling carpet) during the competition: MENZ Katharina (GER, weight category up to 48 kg, won a silver award - total time on the carpet for all fights 14 min., 00 sec.); KLIMKAIT Jessica (CAN, weight category up to 57 kg, won a bronze award - total time on the carpet for all bouts 20 min., 01 sec.); TIMO Barbara (POR, weight category up to 63 kg, won a bronze award - total time on the carpet for all bouts 22 min., 26 sec.); NIIZOE Saki (JPN, weight category up to 70 kg, won the bronze award - total time on the carpet for all bouts 22 min., 13 sec.).

In turn, the athletes (women) who had the fewest fights (4 times on the wrestling mat) during the "World Championship - 2022": DICKO Romane (FRA, weight category over 78 kg, won the gold award – total time on the mat for all bouts 09 min., 25 sec.) and SOUZA Beatriz (BRA, weight category over 78 kg, won the silver award – total time on the mat for all bouts 12 min., 19 sec.).

According to the quantitative and qualitative analysis of the official protocols [17] "Emergency - 2022", the largest number of participants was determined – 44 women, weight category up to 70 kg. On the contrary, the least numerous – 29 women, turned out to be in the weight category over 78 kg (the results of a comparative analysis of the technical components of the finalists of the 2022 World Championship with similar indicators demonstrated by them last year are given in fig. 2).

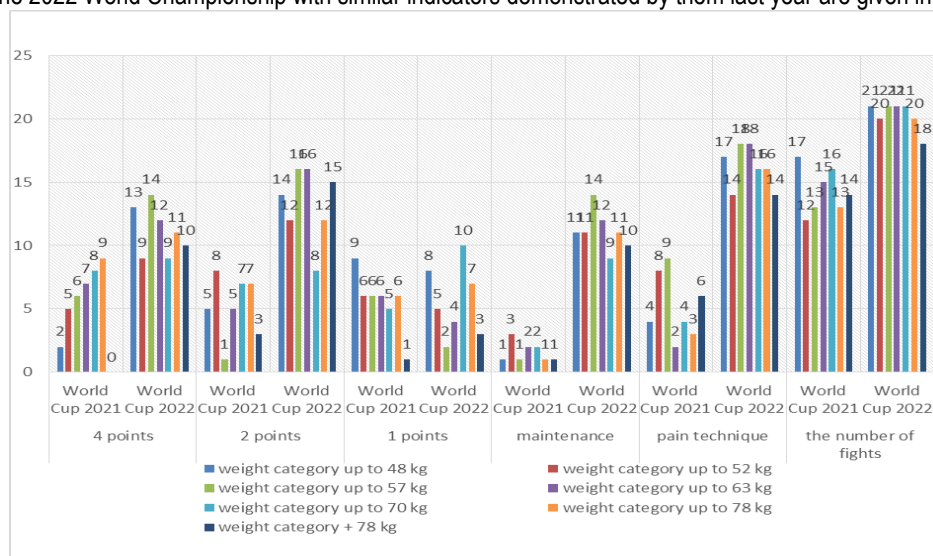


Fig. 2. Comparative analysis of the technical preparation of highly qualified female athletes, finalists of the World Sambo Championship (2021-2022)

Taking into account the above, as well as in accordance with the official protocols of the highest-ranking competitions [17] (results of monitoring the technical readiness of highly qualified female athletes, champions and medalists of the 2022 World Sambo Championship) it is appropriate to state that the total time of participation of representatives of the studied category in competitive fights in weight categories: up to 52 kg, up to 57 kg, up to 63 kg, up to 70 kg, up to 78 kg - increased, and in athletes (women, Sambo wrestlers), representatives of the weight category to 48 kg – it decreased. Thus, the tasks set before us have been fulfilled, and the main goal of the research has been achieved.

**Conclusion.** As a result of the theoretical research, the members of the research group conducted an analytical and statistical analysis of the technical preparation of highly qualified athletes (women), finalists of the 2022 World Sambo Championship (Bishkek, Kyrgyzstan).

We consider it expedient to take the results of the theoretical research into consideration by leading coaches who specialize in Sambo wrestling (sports section). We recommend focusing the attention of the leading coaches on increasing the indicators of activity and efficiency of the competitive actions of female athletes (women who specialize in Sambo wrestling), namely: development and improvement of technical and tactical preparation of fellow fighters (in the rack: focus on improving the technique of undercuts and hooks; on the ground floor: focus on performing pain techniques on the legs after the opponent is fully restrained); reducing the number of warnings for violation of the rules, through a theoretical study of the current Rules (practical practice of complex technical and tactical combinations); expanding the arsenal of crown technical actions; development of individual tactical schemes for conducting a competitive fight in the rack and parterre with the use of restraints and pain techniques on the arms and legs; improving indicators of the subsystem of biological control of sportswomen; development of physical and special physical fitness of sportswomen.

The results of the theoretical research are implemented in the system of long-term training of members of national teams: «Uzhhorod National University»; Kharkiv National University of Internal Affairs from Sambo wrestling. Separate results of a theoretical study of introduction into the system of hand-to-hand training of cadets: The National Defence University of Ukraine named after Ivan Cherniakhovskiy; Kharkiv National University of Internal Affairs. The members of the scientific research group express their gratitude to the honored coach of Ukraine O. Khatsaiuk for high-quality scientific consulting (scientific-methodical and statistical support) at all stages of the theoretical research.

Prospects for further research in the chosen field of scientific intelligence include analytical and statistical analysis of the technical readiness of highly qualified combat Sambo wrestlers, finalists of the 2022 World Championship (Bishkek, Kyrgyzstan).

#### References

1. Latyshev S.V., Shandrygos V.I. Free wrestling: men, women. Curriculum for secondary schools, specialized children's and youth schools of the Olympic reserve, schools of higher sports skills and specialized educational institutions of a sports profile: education. program, Kyiv: ASBU, 2012. 95 p.
2. Shakhlin L.Ya., Chichiyakova M.A. Psychophysiological features of athletes specializing in judo. Bulletin of Kamyans-Podilsky National University named after. Ivan Ogienko (physical training, sports and healthy people). Kamyans-Podilsky, 2020. – Issue 18. p. 66-69.
3. Vorontsov A.I. Improving physical and technical-tactical training of girls aged 14-15 years old, as they are engaged in boxing at the stage of early basic training: Thesis abstract. ... dis. ... doc. philosophy: 017 – Physical culture and sports, 01 educations/ Pedagogy. Zaporizhzhya, 2022. 246 p.
4. Okopniy A., Tkach Yu., Vovk I., Cherkasova A., Melnyk O. Development of the physical abilities of wrestlers in the free style as a sectional activity at the highest primary level. Scientific journal of the National Pedagogical Dragomanov University. Series № 15. Scientific and pedagogical problems of physical culture (physical culture and sports). Kyiv, 2022. – Issue 8 (153). p. 760-63.
5. Stepaniuk S., Serputko O., Kharchenko-Baranetska L., Koval V., Tkachuk V. The problem of training athletes for aikido in another period of adulthood before attestation for the first and other tributes. Scientific journal of the National Pedagogical Dragomanov University. Series № 15. Scientific and pedagogical problems of physical culture (physical culture and sports). Kyiv, 2022. – Issue 1 (145). p. 13-16.
6. Andriytssev V.O. Improvement of technical and tactical wrestlers in the freestyle at the stage of specialized basic training: abstract of the thesis. diss. ... Cand. of Physical Scien. and Sport: 24.00.01. Lviv, 2016. 23 p.
7. Gurby David, G., & Guillaume, Jomand (2015). The evolution of Women's Wrestling: History, Issues and Future. International Journal of Wrestling Science, 5 (1), 2-12. DOI: 10.1080/21615667.2015.1040536.
8. Rovniy A., Mulyk K., Perebeynos V., Ananchenko K., Pasko V., Perevoznyk V., Aleksieiev A., Dzhyim V. (2018). Optimization of judoist training process at a stage of gradual decline of sporting achievements. Journal of Physical Education and Sport (JPES), 18(4), Art 367, pp.2447–2453. DOI:10.7752/jpes.2018.04367.
9. Kravchuk T.M., Ogar G.O., Novikova A.R. Lowering the weight of the body of athletes in front of the waves (on the butt of sambo wrestling). Martial arts. Kharkiv, 2018. – Issue 4 (10). p. 13-22.
10. Tkach Yu.A. Efficiency of the variative module of sports wrestling for physical training of students of the senior school age: abstract of the thesis. diss. ... Cand. of Physical Scien. and Sport: 24.00.02. Lviv, 2020. 319 p.
11. Latyshev M.V., Kvasnitsya O.M., Spesivikh O.O., Kvasnitsya I.M. Forecasting: methods, criteria, and sports results. Sports Bulletin of Prydniprovyia. Dnipro, 2023. – Issue 1. p. 39-47.
12. Shandrygos V.I., Latyshev M.V., Pervachuk R.V., Yaremenko V.V. Analysis of the results of the performances of the national team of Ukraine for women's struggle. Martial arts. Kharkiv, 2020. – Issue 2 (16). p. 90-104.
13. Kovalev I., Ilchenko S., Zamrozeych-Shadrina S., Dyachenko A., Ludovik T., Antonyuk A. Analysis of technical and tactical training of highly qualified athletes who specialize in Sambo wrestling following the results of the 2021 World Cup.

Scientific journal of the National Pedagogical Dragomanov University. Series № 15. Scientific and pedagogical problems of physical culture (physical culture and sports). Kyiv, 2022. – Issue 2 (146). p. 119-125.

14. Ilchenko S.S., Solodka O.V., Fedorishko A.A., Kovach Sh.A., Kravchenko O.S., Ponomarenko O.V. Comparative analysis of the performance of male and female elite judokas according to the results of the XXXII Summer Olympic Games. Scientific journal of the National Pedagogical Dragomanov University. Series № 15. Scientific and pedagogical problems of physical culture (physical culture and sports). Kyiv, 2020. – Issue 1 (143). P.p. 57-66.

15. Dyachenko A.A., Raitarovska I.V. Analytical and statistical analysis of the technical and tactical preparedness of highly qualified judokas based on the results of the Olympic Games – 2020: collective monograph, Vinnytsia: European Scientific Platform, 2021. P.p. 1-13.

16. Khatsaiuk O., Solodka O., Yakovliv V., Myronov Yu., Kusovska O., Merdov S., Beloshenko Yu. Analytical and statistical analysis of the technical preparation of highly qualified female athletes who specialize in judo. Scientific journal of the National Pedagogical Dragomanov University. Series № 15. Scientific and pedagogical problems of physical culture (physical culture and sports). Kyiv, 2023. – Issue 1 (159). p. 21-27.

17. International Sambo Federation (ISF, World Sambo Championships, Bishkek, Kyrgyzstan (M&W SAMBO)) (2022). URL: <https://sambo.sport/en/events/championat-mira-po-sambo-muzhchiny-zhenshc-h-iny-boevoe-sambo-2022/results/> (date of application: 02.02.2023).