Methodology for the individualized teaching of technical actions to female judokas at the initial training stage

https://doi.org/10.65149/eajss.2026.v6i6.a008

[1]Berdakhova Nursulu Gagarin kizi
[1]Branch of Uzbekistan state university of physical education and sport, Chirchik, Uzbekistan

Abstract
This article discusses the improvement of individualized instruction in teaching technical movements to female judokas at the initial training stage. To enhance the technical preparedness of female judokas, proposals and recommendations are provided for the sequential teaching of techniques performed in standing (tachi-waza) and ground (ne-waza) positions, taking into account their anthropometric indicators.
Keywords: judo, initial training stage, technical preparation, standing and ground positions, individualization.

Introduction

The high level of attention paid to women's sports in the global community has prompted numerous studies aimed at scientifically substantiating the positive impact of physical education and sports on the bodies of women and young girls. In particular, with the number of girls practicing judo steadily increasing, scientifically improving the training system for young female judokas has become a pressing issue, placing great responsibility on scientists and researchers. This creates a need to differentiate training content for female judokas in the initial preparation stage, tailored to their abilities to master technical skills. It especially necessitates the gradual and scientifically-based acquisition of these skills in conjunction with modern technologies and specialized sports equipment, the development of mechanisms to predict athletic performance, and the practical implementation of modules for their use.

With the ever-increasing attention to women's sports in our country, particularly judo, and the systematic preparation and results aimed at training young athletes for international arenas, it has become especially crucial to scientifically improve the process of teaching technical techniques to female judokas at the initial training stage. "To construct sports facilities in each region for holding mass sports and physical activities in judo." To sustain achieved results and reach higher milestones in the future, the proper organization of technical training at the initial stage is a decisive factor. Rational planning, the gradual increase in complexity, and the systematic implementation of daily, weekly, monthly, and annual loads, along with the use of innovative training tools and specialized technologies, necessitate the systematic monitoring of training outcomes.

The aim of the study is to develop proposals and recommendations for improving the individualization of technical training for female judokas at the initial training stage.

The object of the study was the educational and training process of female judokas at the initial training stage of the sports school in the city of Nukus, Republic of Karakalpakstan.

Methods

The research employed methods of analysis and generalization of scientific and methodological literature, pedagogical observation, pedagogical experiment, and mathematical-statistical analysis.

Results and discussion

As shown in Table 1, indicators of special physical fitness were studied and analyzed. Based on the results, the number of head spins (repetitions) was 10.4±0.9 for the experimental group and 10.9±1.2 for the control group. According to Student's t-test, no statistically significant difference was observed between the results ($t=0.9$, $P>0.05$). The number of bridge kick-overs (repetitions) in 30 seconds was 11.3±1.3 for the experimental group and 12.2±1.3 for the control group. According to Student's t-test, no statistically significant difference was observed between these results either ($t=1.5$, $P>0.05$). The number of forward rolls (repetitions) in 30 seconds was 11.3±1.3 for the experimental group and 12.2±1.3 for the control group. Similarly, according to Student's t-test, no statistically significant difference was found between the results ($t=1.5$, $P>0.05$).

Technical and tactical training indicators

Table 1. Indicators of special physical and technical preparedness of female judokas at the initial training stage at the beginning of the experiment (n=36)

No.	Tests	Experimental Group			Control Group			t	p
		$\bar{x}$	σ	V%	$\bar{x}$	σ	V%		
Special Physical Preparedness									
1.	Head rotations (reps) 30 s.	10.4	0.9	9.3	10.9	1.2	11.2	0.9	p > 0.05
2.	Jumps over the head from a bridge position (reps) (30 s)	11.3	1.3	11.6	12.2	1.3	11.4	1.5	p > 0.05
3.	Forward rolls (30 s) (reps)	20.5	2.3	11.4	21.8	2.8	12.8	1.2	p > 0.05
Technical Preparedness									
1.	Uki-otoshi (30 s) (reps)	11.5	1.3	11.7	12.6	1.6	13.1	1.7	p > 0.05
2.	O-goshi (30 s) (reps)	11.8	1.2	10.8	12.7	1.6	12.6	1.4	p > 0.05
3.	De-ashi-harai (30 s) (reps)	13.7	1.8	13.5	14.1	1.7	12.1	0.5	p > 0.05
4.	Tomoe-nage (30 s) (reps)	12.9	1.4	11.4	13.4	1.7	12.9	0.7	p > 0.05
5.	Yoko-otoshi (30 s) (reps)	11.3	1.3	11.9	12.1	1.6	13.4	1.2	p > 0.05
6.	Kesa-gatame (30 s) (reps)	14.2	1.6	11.5	15.1	1.5	10.5	1.4	p > 0.05
7.	Ude-hishigi-juji-gatame (30 s) (reps)	14.5	1.9	13.3	15.4	2.1	13.7	1.1	p > 0.05
8.	Nami-juji-jime (30 s) (reps)	15.7	1.9	12.4	16.5	2.1	12.9	0.9	p > 0.05

were studied and analyzed. Based on the results, the uki-otoshi (30 s) exercise was performed 11.5±1.3 times in the experimental group, while this indicator was 12.6±1.6 times in the control group. For the O-goshi (30 s) exercise, the average performance for the female judokas was 11.8±1.2 times in the experimental group and 12.7±1.6 times in the control group; analysis based on the Student's t-test showed t=1.4 and P>0.05. The results of the de-ashi-harai (30 s) exercise for female judokas showed an average of 13.7±1.8 times in the experimental group and 14.1±1.7 times in the control group; analysis based on the Student's t-test showed t=0.5 and P>0.05. For the tomoe-nage (30 s) exercise, the performance was 12.9±1.4 times in the experimental group and 13.4±1.7 times in the control group; according to the Student's t-test, no statistically significant difference was observed between the results (t=0.7, P>0.05). For the yoko-otoshi (30 s) exercise, the performance was 11.3±1.3 times in the experimental group and 12.1±1.6 times in the control group; according to the Student's t-test, no statistically significant difference was observed between the results (t=1.2, P>0.05). The results of the kesa-gatame (30 s) exercise were analyzed. The average performance in the experimental group was 14.2±1.6 times, while in the control group it was 15.1±1.5 times; analysis based on the Student's t-test showed t=1.4 and P>0.05. For the ude-hishigi-juji-gatame (30 s) exercise, the performance was 14.5±1.9 times in the experimental group and 15.4±2.1 times in the control group; according to the Student's t-test, no statistically significant difference was observed between the results (t=1.1, P>0.05). The results of the nami-juji-jime (30 s) exercise were analyzed. The average performance in the experimental group was 15.7±1.9 times, while in the control group it was 16.5±2.1 times; analysis based on the Student's t-test showed t=0.9 and P>0.05.

We have developed a sequence for individualizing the performance of standing and parterre techniques for female judokas in the initial training stage, based on their anthropometric indicators (see Table 2).

In judo, the Nage-waza system is of great importance as a set of fundamental technical movements, forming female judokas' skills in unbalancing and throwing an opponent to the mat from a standing position. Within this system, Te-waza, or hand techniques, hold a special place. When performing hand techniques, the primary power and control functions are carried out by the muscles of the arm, forearm, and shoulder. This allows the judoka to precisely control the process of breaking her opponent's balance and bringing her into an advantageous position. The effectiveness of the movement is based on the seamless integration of the kuzushi, tsukuri, and kake phases. Te-waza techniques serve as an important foundation for building the technical

Table 2. Program aimed at increasing the effectiveness of standing techniques for female judokas in the initial training stage (1-part)

No.	Techniques	Level	Partner practice (during training session)	Practice with a grappling dummy (after training s
1. Te-waza (Hand techniques)				
1	**Uki-otoshi**	I	Twice a week, 14–20 times, 4–5 repetitions	Once a week, 12–16 times, 3–4 repetitions
2	**Sumi-otoshi**	I	Twice a week, 12–18 times, 4 repetitions	Once a week, 10–12 times, 3 repetitions
3	**Obi-otoshi**	I	Twice a week, 10–14 times, 3–4 repetitions	Once a week, 8–10 times, 3 repetitions
4	**Sukui-nage**	I	Twice a week, 10–14 times, 3–4 repetitions	Once a week, 8–10 times, 3 repetitions
5	**Kibisu-gaeshi**	I	Twice a week, 10–12 times, 3 repetitions	Once a week, 8–10 times, 2–3 repetitions
6	**Kuchiki-taoshi**	I	Twice a week, 10–12 times, 3 repetitions	Once a week, 8–10 times, 2–3 reps
7	**Morote-gari**	I	1–2 times a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
2. Koshi-waza (hip techniques)				
8	**O-goshi**	I	Twice a week, 12–18 times, 4 reps	Once a week, 10–12 times, 3 reps
9	**Uki-goshi**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
10	**Koshi-guruma**	I	Twice a week, 10–14 times, 3–4 reps	Once a week, 8–10 times, 3 reps
11	**Tsuri-goshi**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
12	**Ushiro-goshi**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
13	**O-guruma**	I	1–2 times a week, 10–14 times, 3–4 reps	Once a week, 8–10 times, 2–3 reps
3. Ashi-waza (foot techniques)				
14	**De-ashi-harai**	I	Twice a week, 14–20 times, 4–5 reps	Once a week, 12–16 times, 3–4 reps
15	**Okuri-ashi-harai**	I	Twice a week, 12–18 times, 4 reps	Once a week, 10–12 times, 3 reps
16	**Sasae-tsurikomi-ashi**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
17	**Hiza-guruma**	I	Twice a week, 12–18 times, 4 reps	Once a week, 10–14 times, 3 reps
18	**O-soto-gari**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
19	**O-soto-otoshi**	I	Twice a week, 10–14 times, 3–4 reps	Once a week, 8–10 times, 3 reps
20	**O-uchi-gari**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
21	**Ko-uchi-gari**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
22	**Ko-soto-gari**	I	Twice a week, 12–16 times, 4 reps	Once a week, 10–12 times, 3 reps
23	**Ko-soto-gake**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
4. Ma-sutemi-waza (rear sacrifice throws)				
24	**Tomoe-nage**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
25	**Sumi-gaeshi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
26	**Hikikomi-gaeshi**	I	Twice a week, 10–14 reps, 3–4 sets	Once a week, 8–10 reps, 2–3 sets

preparedness of female judokas in the initial stage, as they develop their fundamental movement coordination and strength management abilities.

Koshi-waza, or hip techniques, are considered one of the most effective and technically complex groups of throws in judo. In these techniques, the athlete's hip area serves as the primary fulcrum and center of rotation. The correct positioning of the body's center of gravity, along with the lifting and rotating mechanisms executed through the hips, play a decisive role in the process of throwing an opponent. Koshi-waza techniques require not only strength but also a high level of coordination and body balance. These techniques serve to develop body control, core stability, and technical precision in female judokas, laying the foundation for more complex combination movements.

At the beginning of the pedagogical experiment, no statistically significant differences were identified between the studied parameters of the female judokas in the experimental and control groups during the initial training stage (see Table 1).

As can be seen from Table 3, based on the results obtained at the end of the study on the special physical preparation of young female judokas at the initial training stage, a significant difference was observed for the 30-second “head circle” (reps) exercise. The

Table 3. Program aimed at increasing the effectiveness of standing techniques for female judokas in the initial training stage (2-part)

25	**Sumi-gaeshi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
26	**Hikikomi-gaeshi**	I	Twice a week, 10–14 reps, 3–4 sets	Once a week, 8–10 reps, 2–3 sets
5. Yoko-sutemi-waza (side sacrifice throws)				
27	**Yoko-otoshi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
28	**Yoko-wakare**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
29	**Uki-waza**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
6. Makikomi (wrapping throws – combination group)				
30	**Soto-makikomi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
31	**Ko-uchi-makikomi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
32	**O-soto-makikomi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
7. Uchi-mata and its related variants (special combination)				
33	**Uchi-mata**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
8. Kaeshi-waza (counter techniques)				
34	**Tsubame-gaeshi**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
Osaekomi-waza (10 holding techniques)				
35	**Kesa-gatame**	I	Twice a week, 12–18 reps, 4 sets	Once a week, 10–12 reps, 3 sets
36	**Kuzure-kesa-gatame**	I	Twice a week, 12–16 reps, 4 sets	Once a week, 10–12 reps, 3 sets
37	**Ushiro-kesa-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
38	**Kami-shiho-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
39	**Kuzure-kami-shiho-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
40	**Yoko-shiho-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
41	**Tate-shiho-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
Kansetsu-waza (joint-locking techniques)				
42	**Ude-hishigi-juji-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
43	**Ude-garami**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
44	**Ude-hishigi-ude-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
45	**Ude-hishigi-hiza-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
46	**Ude-hishigi-te-gatame**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
Shime-waza (choking/strangling techniques)				
47	**Nami-juji-jime**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
48	**Gyaku-juji-jime**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
49	**Kata-juji-jime**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
50	**Hadaka-jime**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets
51	**Okuri-eri-jime**	I	2 times a week, 12-16 times, 4 sets	1 time a week, 10-12 times, 3 sets

average score for the female judokas in the experimental group was 14.8±1.6, which was higher than the control group's score of 12.5±1.5. Analysis of the results based on the Student's t-test showed t=3.4, with a significance level of P<0.01. For "forward rolls over the head from a bridge position" (30 s), the experimental group performed 16.3±1.8 reps, while the control group performed 14.2±1.9 reps, with a statistically significant difference between the results according to the Student's t-test (t=2.7, P<0.05). For “forward rolls” (30 s) (reps), the experimental group performed 25.7±2.9 reps, while the control group performed 22.7±2.8 reps, and a significant difference was observed between the results according to the Student's t-test (t=2.5, P<0.05).

In the initial training stage, young female judokas in the experimental group performed the *uki-otoshi* technique (in 30 seconds) an average of 16.5±2.1 times, whereas the control group performed it 14.3±1.8 times. A statistically significant difference was observed between the results, with a Student's t-test value of t=2.6, P<0.05. For the *o-goshi* exercise, the experimental group's performance was 15.7±1.8

repetitions, while the control group's was 13.5±1.6. The Student's t-test confirmed a significant difference between these results, with t=2.9 and P<0.05. For the *de-ashi-harai* technique (in 30 seconds), the experimental group achieved 17.9±2.2 repetitions, compared to 15.1±1.5 repetitions in the control group. A significant difference was observed, with a Student's t-test value of t=3.5, P<0.01. The results for the *tomoe-nage* exercise were 17.6±2.1 repetitions for the experimental group and 15.7±1.8 for the control group, confirmed by Student's t-test values of t=2.7 and P<0.05. For the *yoko-otoshi* exercise, the experimental group's performance was 16.3±2.1 repetitions, compared to 14.3±1.9 in the control group. A statistically significant difference between the results was confirmed, with a Student's t-test value of t=2.4 and P<0.05. For the *kesa-gatame* technique (in 30 seconds), the experimental group performed it 19.5±2.4 times, while the control group performed it 16.1±2.2 times. A significant difference was observed between the results, with a Student's t-test value of t=3.6, P<0.01. For the *ude-hishigi -juji-gatame* technique (in 30 seconds), the experimental group's result was 19.7±2.3 repetitions, compared to 15.6±2.1 in the control group. A significant difference was observed, with a Student's t-test value of t=4.1, P<0.001. Finally, for the *nami-juji-jime* exercise (in 30 seconds), the experimental group's result was 19.4±2.6 repetitions, compared to 17.1±2.1 in the control group. A statistically significant difference between the results was confirmed, with Student's t-test values of t=2.3 and P<0.05.

Conclusion

Based on an analysis of the data obtained from the conducted research, the following conclusions were reached:

The analysis of advanced practices and scientific-methodological literature revealed the need to improve the sequence of technical techniques and training tools, based on the anthropometric indicators of female judokas at the initial training stage in both standing and ground positions.

The technical training model, divided into annual stages, facilitates the gradual development of female judokas and serves to reinforce and enhance their technical skills. This ensures the high-quality acquisition of technical movements and builds the necessary foundation for subsequent stages of specialization.

Establishing weekly workload standards for teaching techniques performed in standing (tachi-waza) and ground (ne-waza) positions is a crucial factor in the systematic organization of the training process. This allows for balancing the volume and intensity of training and increases the effectiveness of mastering technical movements.

Planning training sessions based on weekly standards allows for optimizing the number of repetitions of technical techniques, managing fatigue, and regulating recovery processes. As a result, the stability of technical preparation is ensured, and the consistent development of the athletic skills of young female judokas is achieved.

References

Qodirov, S. E. (2026). Malakali dzyudochilarda maxsus kuch va tezkor-kuch sifatlarini rivojlantirishning ilmiy-uslubiy asoslari. *Fan-Sportga*, (2), 49-52.

Darmenbaeva, K. A. (2026). Boshlang ‘ich tayyorgarlik bosqichida shug ‘ullanuvchi dzyudochi qizlarning jismoniy tayyorgarligini rivojlantirish uslubiyati. *Fan-Sportga*, (3), 25-29.

Тоштурдиев, Ш. Х., & Жарылкапов, У. Б. (2025). Спорт курашлари бўйича 2025 йилги Осиё чемпионатининг илмий-назарий таҳлили. *Fan-Sportga*, (6), 81-85.

Bakhodirovich, J. U. (2024). The methodology of developing the strength qualities of qualified young freestyle wrestlers. *Eurasian Journal of Sport Science*, *1*(1), 34-37.

Жарылкапов, У. Б. (2023). Курашчиларнинг жисмоний ва тактик тайёргарлигини ривожлантириш масалалари. *Fan-Sportga*, (2), 110-111.

Жарылкапов, У. Б. (2023). Планирования тренировочного процесса подготовки борцов женщин по вольной борьбе в возросте 17-19 лет в Каракалпакистане. *SCIENCE and SOCIETY*, (1-2), 33-33.

Жарылкапов, У. Б. (2025). Спорт такомиллашув гуруҳларидаги малакали эркин курашчиларнинг мусобоқа олди жисмоний тайёргарлигини ривожлантириш масалалари. *Fan-Sportga*, (3), 13

-18.
Toshturdiyev, S., & Khodjayev, A. (2020). Effectiveness of methods for improving the technique of performing the snatch in qualified weightlifters. *Eurasian Journal of Sport Science*, *1*(1).

AUTHOR BIOGRAPHY:



Nursulu Gagarin kizi BERDAKHOVA

Employment
Lecturer at Branch of the Uzbekistan state university of physical education and sports

Degree
MD

Research interests
judoka, wrestling, physical education and sport, Theory of physical education, Analyzing of sport competitions