© Eurasian Journal of Sport Science 2024; 1(2): 256-259
https://eajss.uz

Analysis of competitive activity of freestyle wrestlers and the structure of the training process aimed at the development of power endurance

Murodov Kamol Nuritdinovich[1]
[1]Oriental university, Tashkent, Uzbekistan

Abstract

Purpose: is to develop the technology of development of power endurance of qualified wrestlers on the basis of using special simulators and exercises in the process of physical training of qualified freestyle wrestlers.

Methods: The study used such methods as analysis of scientific and methodological literature, pedagogical observation, pedagogical testing, instrumental method, heart rate measurement, pedagogical experiment and methods of mathematical statistics.

Results: In order to create operational control, the experimental group was provided with operational information about the strengths and weaknesses of their opponents, which in turn allowed to eliminate shortcomings and effectively apply the developed method based on the analysis of physical training, thus providing a constant communication. The level of statistical reliability for 10 indicators of physical fitness of qualified freestyle wrestlers at the preparatory stage was equal to $P<0.05$. This, in turn, indicates the positive effectiveness of the developed technology.

Conlcusion: Sports equipment 'ZK' and 'PUSH' designed for the development and improvement of performance of athletes in freestyle wrestling have been developed (certificate of the state unitary enterprise 'Consultative Centre for Intellectual Property under the Agency for Intellectual Property under the Ministry of Justice of the Republic of Uzbekistan' dated 6 August 2021 № 003727). As a result, the development of strength and endurance of freestyle wrestlers and the level of physical fitness improved by 15%;

There was observed arithmetically statistically reliable increase of EG and CG indicators ($P<0,05$) according to the data of comparative analysis of growth of physical fitness indicators of freestyle wrestlers at the end of the study (reliable for 8 out of 10 indicators).

Keywords: analysed competitions, athletes, symptoms, wrestlers, level of physical fitness, international freestyle wrestling competitions, technical and tactical actions (TTA).

Introduction

Freestyle wrestling is one of the sports that occupies a special place in the world due to its rich history, competitive activity and popularity in the Olympic Games. Freestyle wrestling is included in the composition of combat sports, which has peculiar features, where it requires good development of physical qualities. In connection with the sharp increase in competition in wrestling, relevant issues are the analysis of objective data on the growth of physical fitness of athletes and the effectiveness of competition results, as well as the optimization of various aspects of their training on this basis. At present, the problem of education of qualified freestyle wrestlers on the basis of introduction in the training process of methods of development of strength and endurance for effective and prolonged performance of physical actions during competitions, is of great importance.

In world sport, including wrestling, due to the rapid growth of competition, the problem of determining the physical development of wrestlers and obtaining objective data to improve the effectiveness of this process, as well as awareness of new aspects of training athletes is very relevant. There are a number of studies on the selection of special exercises for the development of strength and endurance of freestyle wrestlers, planning modern training systems at different stages of training. However, the issue of improving training methods by means of special sports equipment demonstrating the integration of the development of strength endurance of freestyle wrestlers is becoming urgent.

In our country, due to the implementation of targeted reforms, special attention is paid to the further development of physical culture and sports. The "Creation of complex scientific laboratories for athletes of national sports teams, as well as the introduction of advanced innovative technologies in the training process" are of important significance. At present, Uzbekistan has created a lot of scientific literature on freestyle wrestling, at the same time, there are issues that have yet to be studied, that is, waiting for the solution of many problems, such as: further popularization of freestyle wrestling, involvement of young people in this sport, the creation of scientific and methodological manuals on selection and screening work, supply and preparation of reserve for national teams of Uzbekistan talented and capable athletes in the sport of wrestling.

Methods

The study used such methods as analysis of scientific and methodological literature, pedagogi-

cal observation, pedagogical testing, instrumental method, heart rate measurement, pedagogical experiment and methods of mathematical statistics.

Results and discussion

The research work was conducted in three phases during 2019-2021. The pedagogical research was organized in 3 stages. At the first stage (2019), based on the analysis of special scientific and methodological literature, the theoretical and practical features of the development of power endurance of athletes were studied, the research direction was determined. The topic of the research was formulated. In accordance with the experiments being carried out, the methods were chosen, the working hypothesis was formulated. The goals and objectives of the study were determined, initial materials were collected. The methodology of operational analysis and control of competitive activity of wrestlers was chosen.

The second stage (2019-2021 academic year) on the basis of the use of special simulators and exercises developed in freestyle wrestling, by applying the technology of development of power endurance abilities in experiments, the levels of reliable indicators of competitive activity and physical training of freestyle wrestlers are determined. Pedagogical experiments conducted to determine the effectiveness of specially designed sports equipment “ZK and PUSH” and a set of special exercises are covered in detail.

The third stage (2020-2021 academic year) in the research process were involved 12 freestyle wrestlers with training experience of not less than
5 years in the experimental and control groups. In pedagogical experiments the influence of specially designed sports equipment “ZK and PUSH”, aimed at the effectiveness of the development of power endurance of freestyle wrestlers, and a set of special exercises performed on the wrestling mat was determined. Optimized training loads aimed at the development of power endurance in athletes. The effectiveness of the technology developed for this purpose was reflected in the experiments. The level of power endurance of athletes was determined on the basis of the Republican College of Olympic Reserve and children's and youth sports school № 1 of Bektemir district, the effectiveness of the technology was substantiated by means of control tests.

Results of comparative analysis in light weight categories in freestyle wrestling: 22,67% - wrestlers winning due to strength; 28,33% - wrestlers winning due to endurance; 49,00% - wrestlers winning due to TTA. Results of comparative analysis in middle weight categories in freestyle wrestling: 37,5% - wrestlers winning at the expense of strength; 41,00% - wrestlers winning at the expense of endurance; 21,05% - wrestlers winning at the expense of TTA. The results of comparative analysis in heavy weight categories in freestyle wrestling: 48,00% - wrestlers winning at the expense of strength; 34,05% - wrestlers winning at the expense of endurance; 17,05% - wrestlers winning at the expense of TTA. Such distribution is explained by the fact that the wrestling styles used by wrestlers in interna-

Table. The program aimed at improving the strength endurance of freestyle wrestlers

N	Days of the week	1st session (morning)	Type of fulfillment	Allocated time	Intensity
1.	***Monday***	Using the “Chain” method	In group and individualized training. Circle training	3	Medium
2.	***Tuesday***	Using the Border method	Individually and in pairs. Circle training	2	High
3.	***Wednesday***	Sports games	Group	2	Low
4.	***Thursday***	Using the “Chain” method	In group and individualized training. Circle training	3	Medium
5.	***Friday***	Using the Border method	Individually and in pairs. Circle training	2	High
6.	***Saturday***	Competition	With an opponent	2	Low
7	***Sunday***	Active vacation	Individually	14 hours	Total

tional freestyle wrestling competitions have an effective influence on the final result of competitions with a great emphasis on offensive actions.

According to this program, the occupation of qualified freestyle wrestlers was 28 hours per week, per year - 1456 hours, and the time of this program was carried out according to the established requirement, as well as conducted weekly cycles every day (except Sunday) individually and in pairs.

When compiling a program aimed at improving the strength endurance of freestyle wrestlers, it is recommended to simulate in the conditions of training and competitive competitions with a clear consideration of both quantitative and qualitative indicators characteristic of their competitive activity. Of course, the volume of such tasks should be taken into account based on the peculiarities, obtained reliable information, as well as the possibility of using the method of analyzing the data of competitive activity of freestyle wrestlers.

The results at the beginning of the study when performing standing bridge standing were 31.88 in the EG and 32.06 in the CG. At the end of the study, they were 39.77 and 35.71, respectively. The differences between the experimental and control groups were reliable ($P<0.05$).

The results at the beginning of the study in the partner squat exercise were 6.13 in EG and 6.18 in CG. At the end of the study, they were 8.07 and 7.05 respectively. The differences between the experimental and control groups were reliable ($P<0.05$).

The results at the beginning of the study when performing the back throw technique were 27.33 in the EG and 27.49 in the CG. At the end of the study 34.72 and 30.66 respectively. The differences between the experimental and control groups were reliable ($P<0.05$).

The results at the beginning of the study in the exercise forward bends with a partner on the shoulders were 7.35 in EG and 7.43 in CG. At the end of the study, 9.44 and 8.91 respectively. The difference between the experimental and control groups is statistically unreliable ($P>0.05$).

The results at the beginning of the study in the exercise bending forward with a partner with a grip on the waist were 8.06 in the CG and 8.11 in the EG. At the end of the study, 10.11 and 9.58 respectively. The difference between the experimental and control groups is statistically unreliable ($P>0.05$).

At the end of the study, the indicators of power endurance of EG and CG showed a degree of reliability in 8 indicators ($P<0.05$).

Conclusion

According to the analysis of scientific and methodological literature aimed at studying the competitive activity and training processes of athletes in freestyle wrestling, it was possible to determine the presence of a strong need for the formation of power endurance and technical and tactical training of qualified wrestlers in modern conditions on the basis of innovative methods. The development of power endurance of wrestlers on the basis of the use of special simulators and exercises in freestyle wrestling is considered to be one of the topical and understudied problems.

At the international freestyle wrestling competitions, in which the bouts of athletes were analysed, it was found that the level of power endurance of wrestlers is at a high level and meets the requirements. It was also established that the level of strength endurance of freestyle athletes in the Republican competitions, in which it was found that the level of strength endurance of wrestlers does not meet the required level. In particular, in the competitions analysed at the international competitions (n=200), the time of competition spent by athletes at a high pace was 10.48 minutes on average. Fatigue symptoms in the athletes started after an average of 8.1 minutes. Also, in the analysed competitions at the national competitions (n=200), the competition time spent by athletes at a high pace was on average 6.51 minutes.

Fatigue symptoms in athletes started on average after 3.51 minutes.

In order to develop the abilities of power endurance of freestyle wrestlers and increase their efficiency, special complexes of exercises performed on the wrestling mat were developed. As a result, the level of development of power endurance of freestyle wrestlers improved by 16 %;

The main tasks at the stage of special training are: to achieve high special activity by improving the most popular technical and tactical actions, to improve the mastery of competitions taking into account the requirements of competitive activity. The method of analysis of competitive activity of wrestlers is implemented and tested on training, control and competi-

tive competitions. Individual technical and tactical reserve of wrestlers using strength, demonstrating endurance, creation of the scheme of operational management of athletes wrestling in the performance of technical and tactical movements, and the subsequent provision of reliable information about SF indicators on the basis of adjustment of different levels of the training process.

References

Cynarski, W. J., Słopecki, J., Dziadek, B., Böschen, P., & Piepiora, P. **(2021).** *Indicators of Targeted Physical Fitness in Judo and Jujutsu—Preliminary Results of Research. International Journal of Environmental Research and Public Health*, 18(8), 4347. doi:10.3390/ijerph18084347.

Diel, K., Broeker, L., Raab, M., & Hofmann, W. **(2021).** *Motivational and emotional effects of social comparison in sports.* Psychology of Sport and Exercise, 57, 102048.

Furley, P., Schweizer, G., & Laborde, S. **(2021).** *Emotional intelligence and drawing inferences from nonverbal cues in sports.* International Journal of Sport and Exercise Psychology, 1-21.

Herman, A. M., Esposito, G., & Tsakiris, M. **(2021).** *Body in the face of uncertainty: The role of autonomic arousal and interoception in decision-making under risk and ambiguity.* Psychophysiology, 58(8),

Hoffmann, S., Jendreizik, L. T., Ettinger, U., & Laborde, S. **(2019).** *Keeping the pace: The effect of slow-paced breathing on error monitoring.* International journal of psychophysiology: official journal of the International Organization of Psychophysiology, 146, 217-224. doi: 10.1016/j.ijpsycho.2019.10.001.

Hosaini, A., Besharat, M. A., & Jahed, H. A. **(2015).** *Moderator Role of Perceived Overtraining on Relationship between Perfectionism with Fatigue and Sport Burnout in Elite Athletes*. Sport Psychology Studies, 4(13), 154-137. doi: 20.1001.1.23452978.1394.4.13.9.6.

Kalén, A., Bisagno, E., Musculus, L., Raab, M., Pérez-Ferreirós, A., Williams, A. M., & Ivarsson, A. **(2021).** *The role of domain-specific and domain-general cognitive functions and skills in sports performance:* A meta-analysis. Psychological bulletin, 147(12), 1290-1308. doi: 10.1037/bul0000355.

Korobeynikov, G., Imas, Y., Korobeynikova, L., Ludanov, K., Shatskykh, V., Tolkunova, I., & Mishchenko, V. **(2021).** *Body Composition and Heart Rhythm Variability in Elite Wrestlers*. Sport Mont, 19(S2), 147-151.

Korobeynikov, G., Cynarski, W. J., Kokun, O., & Sergienko, U. **(2021).** *Link between neurodynamics and cognitive functions among athletes practicing different martial arts.* Revista iberoamericana de psicología del ejercicio y el deporte, 16(1), 8 -10.

Latyshev, M., & Holovach, I. **(2021).** *Improvement of the Technical and Tactical Preparation of Wrestlers with the Consideration of an Individual Combat Style.* SportMont, (19), 23-28. doi: 10.26773/smj.210604.

AUTHOR BIOGRAPHY:



Kamol Nuritdinovich MURODOV

Employment
Lecturer at Oriental university

Degree
PhD

Research interests
Wrestling, weightlifting, fitness, Physical education and sport, Theory of physical education, Analyzing of sport competitions