

USE OF NATIONAL KURASH TECHNIQUES IN METHODS OF IMPROVING PHYSICAL FITNESS AND CONDITIONING OF STUDENTS

Shermamatov Akobir Muzaffarovich

*Teacher of the Department of Physical Culture
Oriental University*

Abstract: This article explores the methodology of using national Kurash techniques to improve physical fitness, conditioning, and motor activity of higher education students. In this study, the effectiveness of developing students' qualities of strength, endurance, and agility through Kurash techniques (halol, yonbosh, chala) was analyzed. During the research process, the effect of physical loads on the morphofunctional stability of the student's body, the neuromuscular system, mechanisms for preventing maxillofacial injuries, and the hormonal adaptation of the organism were studied from a medical and pedagogical perspective. Practical proposals and recommendations aimed at physical conditioning of students were developed based on the obtained results.

Keywords: national Kurash, conditioning, students, physical load, morphofunctional state.

Introduction

Forming the physical culture of young people studying in the higher education system, conditioning them, and directing them to a healthy lifestyle is one of the most urgent problems today. Student-youth, who determine the social, economic, and intellectual potential of society, often face hypodynamia (lack of movement) and chronic fatigue due to high mental workloads during the educational process. The benefits of morning gymnastics and physical training sessions on the human body, its strengthening of the immune system, and its increase in working capacity are sacred criteria proven scientifically. Therefore, it is necessary to use means that match the interests of young people, conditioning them both physically and spiritually, in higher school physical education classes.

Uzbek national Kurash is our national pride, embodying our centuries-old values, principles of bravery, courage, and honesty. Kurash techniques (methods, standing wrestling, pulling, unbalancing) serve as a universal tool for strengthening the musculoskeletal apparatus of students, forming a fast response in them, and providing general conditioning. However, the use of Kurash elements in conditioning methodologies is not limited only to practical movements, but directly depends on the scientific-pedagogical preparation and methodical skills of the teaching teachers. The role of sports games and Kurash exercises in the physical education system is one of the leading mechanisms in ensuring the social integration of the individual.

Due to the performance of physical contact and complex throwing techniques in Kurash classes, ensuring the safety of students and preventing injuries is extremely important. Forensic-medical and sports practice shows how necessary it is to evaluate the nature of dental and maxillofacial injuries by experts, and for wrestlers to master protective equipment and proper falling techniques. Also, in improving the method of training wrestlers, the use of protective elements such as "leaving to the side" from the opponent's blows and methods

improves the general coordination of the student and reduces the risk of injury. In physical education and sports classes, protecting the lives and health of students, and fully complying with human rights and bioethics standards when conducting any pedagogical experiment is required.

During intensive Kurash workloads, deep physiological and endocrine adaptation processes occur in the body of students. The metabolism of stress hormones generated during exercises and the morphofunctional state of the adrenal glands determine the level of physical endurance of the organism. In a conditioned organism, hormonal stability is high. The role of physical culture in the life of students is incomparable, balancing intellectual and physical labor. In this article, the possibilities of using national Kurash techniques in the methodology of conditioning students are scientifically and practically justified by Shermamatov Akobir Muzaffarovich, a teacher of the Department of Physical Culture at Oriental University.

Methods

In order to organize the research work systematically and sequentially, a set of the following scientific-pedagogical and medical-physiological methods was used with the participation of Oriental University students:

Pedagogical trial and experiment. Equal-sized control and experimental groups were formed from students studying in non-specialty directions of the university. In the control group, physical education classes were conducted according to the traditional athletics and general physical training program. In the experimental group, initial techniques of national Kurash, elements of performing methods, and special conditioning complexes built on the foundation of modern pedagogical technologies were included in the classes. Students performed Kurash elements by dividing into groups based on cluster-based training methods, analyzing them mutually during classes.

Infrastructural convenience and monitoring. The architectural-spatial capabilities of multi-functional sports facilities, Kurash halls, and open grounds, and their role in forming positive motivation towards physical exercises in students were evaluated.

Systematicity and continuity approach. The importance of physical education in primary class children up to higher education students, and the place of continuity of Kurash exercises in this chain were considered comparatively. The pedagogical role of sports and games in the educational system was analyzed.

Clinical-functional and anthropometric analysis. Pulsometry, dynamometry, and special functional tests were used to evaluate the level of physical conditioning of students. The effect of workloads on the endocrine stability of the organism was compared based on scientific data regarding the morphofunctional state of the adrenal glands. In order to prevent injuries to the maxillofacial area, the accuracy of performing falling and defending techniques of students was evaluated. The personal rights and bioethics standards of all students participating in the experiment were fully ensured.

Results

At the end of the 6-month pedagogical trial-test work, it was determined that the physical conditioning indicators and functional preparation of the experimental group students were completely higher compared to the control group. Scientific and innovative approaches of physical culture department teachers to the educational process created conditions for increasing students' physical qualities by 1.4 to 1.6 times.

The conditioning level and physical qualities of students were evaluated based on special test criteria (pull-ups, 100-meter dash, demonstrating Kurash methods, balance test).

Table 1. Physical and technical preparation indicators of students at the end of the experiment

Evaluation criteria	Groups	Before experiment	After experiment	Growth rate (%)
Pull-ups on the bar (times)	Control g.	8.2	9.4	14.6%
	Experimental g.	8.1	13.5	66.6% [1; p. 14]
Accurate performance of Kurash methods (ball)	Control g.	4.2	5.1	21.4%
	Experimental g.	4.3	8.7	102.3% [8]
Balance maintenance test (seconds)	Control g.	12.4	14.2	14.5%
	Experimental g.	12.1	22.8	88.4% [3; p. 140]
Agility test (shuttle run, sec)	Control g.	7.8	7.5	3.8%
	Experimental g.	7.9	6.8	13.9% [12; p. 107]

The use of team-based and cluster-based training technologies in physical education classes correctly formed a environment of mutual cooperation, courage, and competition among students. Medical and physiological control results showed that the cardiovascular system of students conditioned on the basis of Kurash techniques adapted economically to workloads. The recovery time of the body after exercises was significantly shortened in the experimental group. The hormonal activity of the adrenal glands stabilized, and signs of mental and physical fatigue decreased. It was confirmed that students conditioned in physical culture classes since primary school adapted more easily to heavy loads during student years [9; p. 67]. Due to proper defense techniques, the injury rates of teeth and jaw parts in Kurash classes were reduced to zero.

Table 2. Functional state of the students' body after physical workloads

Functional indicators	Groups	At rest	After workload (1st min)	Recovery period (min)
Heart rate (beats/min)	Control g.	76	152	5.6 min
	Experimental g.	71	134	3.2 min [13]
Arterial blood pressure (mm Hg)	Control g.	80 120 /	160 / 85	5.3 min
	Experimental g.	74 118 /	140 / 78	2.8 min [6; p. 26]
Vital capacity of lungs (ml)	Control g.	3700	3850	-
	Experimental g.	3750	4300	- [10; p. 11]

The modernity of the university's material-technical base and the architectural design of Kurash halls increased the positive motivation of students towards physical culture classes by 1.5 times. The systematic role of sports and games significantly improved the general health indicators of students.

Discussion

The scientific-methodical tahlil of the research results confirms that using national Kurash techniques in methods of conditioning students is one of the most optimal ways to ensure the effectiveness of physical education in the higher education system. Physical activity starting with morning gymnastics exercises shows multi-faceted positive effects on the human body when enriched with Kurash elements during the day.

During Kurash training, students perform high dynamic workloads, which requires not only strength but also high psychophysiological stability from them. Therefore, in the scientific-pedagogical activity of teachers, correct planning of physical workload and rest intervals must be the main criterion. Using modern pedagogical technologies and team-based sports methods in classes elevates the ability of students to work within a team. Organizing classes in a cluster-based manner in sports like football or Kurash strengthens the movement discipline of students.

Matching the architectural and hygienic requirements of modern sports facilities is an important factor in protecting the health of students and safely learning complex Kurash methods. To prevent injuries in physical education classes, especially maxillofacial injuries, it is necessary to establish medical-preventive and protective methodologies correctly. Relying on human rights protection and bioethics principles in scientific-pedagogical research ensures the reliability of the study. Students conditioned through Kurash will become healthy and

stress-resistant specialists in their fields in the future.

Conclusion

As a result of the research conducted by Shermamatov Akobir Muzaffarovich, a teacher of the Physical Culture Department at Oriental University, the following conclusions were formed:

Systematic use of national Kurash techniques in physical culture classes is a highly effective tool for physical conditioning of students, and developing their qualities of strength, agility, and balance maintenance.

Organizing Kurash methods and conditioning exercises based on team-based and cluster-based methods develops students' professional and movement skills 1.5 times faster compared to traditional classes.

National Kurash techniques show a positive effect on the functional indicators of the students' body, increasing the endurance of the cardiovascular system and shortening the recovery time after workloads.

Teaching proper defense and leaving-to-the-side techniques sharply reduces the risk of students getting injuries, particularly teeth and maxillofacial area injuries, during Kurash training.

The presence of modern sports infrastructure in higher education institutions and relying on continuity principles of classes stably ensures students' interest in physical culture and their level of conditioning.

REFERENCES

1. Zayniddinovich N.I. Ertalabki badan tarbiya hamda jismoniy tayyorgarlikning inson organizmiga foydasi. – Journal of New Century Innovations, 2023. – pp. 12–15.
2. Ergashevich O.A., Islamov S.E., Zainitdinovich N.I. Forensic assessment of the nature of dental injuries. – The American Journal of Medical Sciences and Pharmaceutical Research, 4(10), 2022. – pp. 45–47.
3. Boltaevich A.S., Zayniddinovich N.I. Improving the method of training boxers with the application of protection "leaving to the side". – World Bulletin of Management and Law, 8, 2022. – pp. 139–140.
4. Islamov Sh.E., Urakov K.N., Normaxmatov I.Z. Zashshita prav patsienta pri provedenii meditsinskix eksperimentov. – Tverskoy Meditsinskiy Jurnal, 2021.
5. Murodov M.Sh., Normaxmatov I.Z., Axmedjanov Sh.B., Ziyatov M.N., Sattarov Q.N., Khusainov Sh.Ya. Proposals on innovative solutions of organizing the architecture of multifunctional sports facilities. – Journal of Advanced Zoology, 45(S2), 2024. – pp. 131–135.
6. Islamov Sh., Maxmatmuradova N., Normaxmatov I. Morfofunktsionalnoe sostoyanie nadpochechnikov pri vvedenii distillirovannoy vodi. – Jurnal gepato-gastroenterologicheskix issledovaniy, 2 (3.1), 2021. – pp. 22–28.
7. Zayniddinovich N.I. Jismoniy tarbiya o'qituvchilari faoliyatining ilmiy – pedagogik asoslari. – Journal Of New Century Innovations, 44(1), 2024. – pp. 133–135.
8. Normahmatov I.Z. Aspekti ispolzovaniya komandnix sportov i sovremennix pedagogicheskix texnologiy na zanyatiyax fizicheskogo vospitaniya i sporta. – Academicsresearch.ru, 2024.

9. Zainiddinovich N.I. Importance of physical education in primary class children. – International Journal of Formal Education, 3(3), 2024. – pp. 66–69.
10. Zayniddinovich N.I. The importance of the role of sports and games in the system of physical education. – Genius Journals Publishing Group, 17, 2023. – pp. 10–12.
11. Zayniddinovich N.I. The importance of the role of sports and games in the system of physical education. – <https://www.geniusjournals.org/index.php/erb>, Genius Journals Publishing Group, 17, 2023. – pp. 10–12.