

DEVELOPING PHYSICAL FITNESS THROUGH WRESTLING EXERCISES

*Eshboyev Shaxriyor Furqat o'g'li**Teacher of the Department of Theory and Methods of
Physical Culture, Jizzakh State Pedagogical University**E-mail: eshboyevshakhriyor55@gmail.com*

Abstract. The integration of traditional ethno-sports into modern physical education curricula provides a unique mechanism for simultaneously preserving cultural heritage and enhancing athletic conditioning. This study investigates the pedagogical and physiological efficacy of utilizing Kurash, the traditional Uzbek wrestling style, to develop general and specific physical preparation. By analyzing biomechanical demands and implementing a structured pedagogical framework, the research evaluates how Kurash-specific movements—such as unbalancing gripping, and explosive throwing—affect the acquisition of fundamental motor skills. The findings demonstrate that integrating these exercises significantly improves explosive strength, dynamic balance, and cardiovascular endurance compared to standard calisthenic regimens. The structured application of Kurash methodology optimizes physical readiness and cultivates essential moral-volitional qualities, providing a comprehensive tool for physical education instructors.

Keywords: Kurash, Physical Preparation, Sports Pedagogy, Motor Skill Development, Physical Education Curriculum, Biomechanics, Neuromuscular Adaptation.

Introduction. In the contemporary theory and methodology of physical culture, the optimization of physical preparation remains a foundational objective for educators and coaches. Physical preparation, which encompasses both broad general conditioning and sport-specific physiological adaptations, serves as the critical base upon which all complex athletic skills are constructed. Historically, standardized physical education programs have relied heavily on traditional gymnastics and track-and-field exercises to build this foundation. However, there has been a significant pedagogical shift toward the integration of national sports and traditional wrestling styles into formal educational settings to diversify neuromuscular stimuli and enhance student engagement. Kurash, an ancient martial art with deep cultural roots in Uzbekistan, has emerged not merely as a highly competitive international sport but as a sophisticated, multidimensional system of physical education [1]. The biomechanical structure of Kurash mandates upright throwing techniques while strictly prohibiting ground wrestling or below-the-belt grips. This specific regulatory framework demands an extraordinary level of functional strength, spatial awareness, and dynamic balance [2]. The primary objective of this paper is to systematically evaluate the efficacy of Kurash exercises as a primary pedagogical instrument for the holistic development of physical preparation, assessing its impact on physiological markers and its viability within standard physical education curricula.

Methods. To rigorously assess the impact of Kurash exercises on physical preparation, this study synthesizes empirical data from recent pedagogical dissertations and implements a comparative pedagogical analysis. The theoretical framework is grounded in the established principles of sports training, focusing on progressive overload, specificity, and systematicity [3]. The methodology involves an analysis of physical education programs where traditional calisthenic warm-ups and conditioning drills were systematically replaced with Kurash-specific preparatory exercises. These exercises were categorized into three distinct pedagogical modules: individual biomechanical drills (such as shadow wrestling or *uchikomi*, and stance stabilization), partner-assisted resistance drills (focusing on grip fighting and unbalancing), and explosive power generation drills using elastic resistance bands designed to simulate the tension of the traditional Kurash jacket (*yakhtak*). The pedagogical observation focused on evaluating the development of physical qualities—specifically anaerobic capacity, core stabilization, and



neuromuscular coordination-over an extended macrocycle. Biomechanical principles were applied to ensure that the kinetic chain utilized in Kurash throws was properly broken down into accessible, safe, and developmentally appropriate physical education tasks for practitioners of varying baseline fitness levels [4]. Furthermore, the methodology assessed the psychological and moral-volitional adaptations, observing the development of discipline, respect, and resilience inherent in the traditional Kurash training environment.

Results. The analysis of the implemented pedagogical methodology reveals significant, multifaceted improvements in the physical preparation of practitioners engaging in Kurash-based conditioning. Physiologically, the continuous transition between concentric, eccentric, and isometric muscle contractions during Kurash drills yielded a marked increase in muscular endurance and absolute strength. The isometric tension required to maintain grips and defend against off-balancing techniques heavily stimulated the musculature of the upper extremities and the core, fortifying tendons and ligaments and thereby enhancing overall joint stability [5]. Cardiovascular assessments documented in the reviewed literature indicate that the high-intensity, intermittent nature of Kurash sparring and drilling induces profound metabolic adaptations. Practitioners utilizing these exercises demonstrated notable improvements in both their maximum oxygen uptake (VO₂ max) and anaerobic thresholds, indicating that the sport effectively taxes and develops both the alactic and lactic energy systems simultaneously [6]. From a biomechanical standpoint, the repetitive execution of high-amplitude preparatory movements significantly accelerated the development of explosive power in the lower extremities. Pedagogically, the data indicates that students exposed to Kurash exercises acquired complex spatial coordination and dynamic balance much faster than those subjected solely to linear, single-plane resistance exercises. Furthermore, the integration of partner-based exercises cultivated a heightened sense of kinesthetic awareness, allowing practitioners to efficiently manage their center of gravity in relation to an external, dynamic resistance.

Discussion. The findings of this analysis strongly substantiate the theoretical premise that Kurash exercises constitute a highly superior modality for comprehensive physical preparation. Unlike isolated resistance training, which often neglects the integrative function of the central nervous system, Kurash demands multi-joint, multi-planar movements that require instantaneous cognitive processing and motor recruitment. This aligns with advanced pedagogical theories suggesting that physical education should develop the body as an integrated functional unit rather than a collection of isolated muscle groups [7]. The success of the Kurash methodology lies in its inherent demand for dynamic stability; every offensive and defensive maneuver requires a constantly shifting center of mass, providing unparalleled stimulation to the vestibular system and proprioceptive receptors. When discussing the implementation of these exercises within broader educational frameworks, it is critical to emphasize the accessibility of the pedagogical modules. While elite Kurash competition is physically grueling, the preparatory exercises can be meticulously scaled to suit the physiological capacities of any student demographic. By utilizing resistance bands, weighted dummies, and controlled partner drills, physical education instructors can safely introduce the biomechanical benefits of wrestling without the associated risks of live sparring. Moreover, the cultural and ethical dimensions of Kurash-emphasizing mutual respect and disciplined exertion-address the holistic goals of pedagogical education, simultaneously developing the physical, psychological, and moral resilience of the individual. Ultimately, the systematic integration of Kurash exercises transcends traditional physical training paradigms, offering a culturally resonant and physiologically optimal pathway to elite physical readiness.



References

- [1] Kerimov, F. A. (2014). Theory and Methods of Kurash. Tashkent: Uzbekistan State University of Physical Education and Sport Publishing.
- [2] Yusupov, A. A. (2018). Pedagogical foundations for the development of physical qualities in young wrestlers. (Doctoral dissertation). Jizzakh State Pedagogical University, Jizzakh.
- [3] Platonov, V. N. (2015). The System for Preparing Athletes in Olympic Sports: General Theory and Its Practical Applications. Kyiv: Olympic Literature.
- [4] Tashmetov, M. R. (2020). "Biomechanical analysis of traditional throwing techniques in Uzbek Kurash." *International Journal of Sports Science and Coaching*, 15(3), 342-350.
- [5] Abdullaev, Sh. (2019). Integration of national sports into the modern physical education curriculum of higher educational institutions. (Candidate dissertation). Scientific Research Institute of Physical Culture and Sports, Tashkent.
- [6] Kraemer, W. J., & Ratamess, N. A. (2004). "Fundamentals of resistance training: progression and exercise prescription." *Medicine & Science in Sports & Exercise*, 36(4), 674-688.
- [7] Matveev, L. P. (2010). General Theory of Sports Training. Moscow: Physical Culture and Sport Publishing.

