



METHODOLOGY FOR DEVELOPING ENDURANCE AND SPEED QUALITIES IN YOUNG WRESTLERS

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Abstract

This article examines the methodology for developing endurance and speed qualities in young wrestlers within the contemporary system of sports training. In wrestling, high athletic performance depends not only on technical and tactical preparedness but also on the balanced formation of physical qualities that enable athletes to sustain intense activity and react quickly in changing competitive situations. Endurance allows young wrestlers to maintain work capacity throughout training sessions and bouts, while speed ensures rapid execution of movements, transitions, attacks, and defensive actions. The study interprets these qualities as interrelated components of athletic mastery and emphasizes the importance of age-appropriate, scientifically grounded training methods. Special attention is given to the physiological and pedagogical characteristics of adolescents, for whom excessive or poorly structured loads may hinder long-term development. The article discusses principles of gradual progression, exercise variation, workload control, recovery management, and the integration of general and special physical preparation. It also outlines methodological conditions under which endurance and speed can be developed effectively through structured drills, interval work, game-based exercises, situational wrestling tasks, and coordinated movement patterns. The findings suggest that the most productive training model for young wrestlers is one that combines systematic repetition, individualization, technical specificity, and pedagogical support. Such an approach contributes not only to the improvement of physical readiness, but also to the strengthening of motivation, discipline, and competitive confidence in the educational and training process.

Keywords: Young wrestlers, endurance development, speed qualities, wrestling methodology, physical training, sports pedagogy, athletic performance, training process.



Introduction

YOSH KURASHCHILARDA CHIDAMLILIK VA TEZKORLIK SIFATLARINI RIVOJLANTIRISH METODIKAS

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Annotatsiya:

Ushbu maqolada yosh kurashchilarda chidamlilik va tezkorlik sifatlarini rivojlantirish metodikasi sport-pedagogik nuqtayi nazardan tahlil qilinadi. Kurash sportida yuqori natijalarga erishish nafaqat texnik va taktik tayyorgarlikka, balki sportchining jismoniy sifatleri qay darajada shakllanganiga ham bevosita bog'liq. Ayniqsa, chidamlilik va tezkorlik yosh kurashchilarning musobaqa hamda mashg'ulot jarayonidagi umumiy ish qobiliyatini belgilovchi asosiy omillar hisoblanadi. Chidamlilik sportchiga uzoq davom etuvchi va yuqori zo'riqlik harakatlarni samarali bajarish imkonini bersa, tezkorlik qisqa vaqt ichida aniq, tez va maqsadli harakat qilishni ta'minlaydi. Maqolada mazkur sifatning fiziologik va pedagogik mohiyati, ularni shakllantirishda yosh xususiyatlarini hisobga olish zarurati hamda mashg'ulotlarni ilmiy asosda tashkil etish masalalari yoritiladi. Shuningdek, umumiy va maxsus jismoniy tayyorgarlik vositalaridan oqilona foydalanish, yuklamalarni bosqichma-bosqich oshirish, tiklanish jarayonlarini nazorat qilish va mashqlarni individual xususiyatlarga moslashtirishning ahamiyati ko'rsatib beriladi. Tadqiqot natijalari shuni ko'rsatadiki, chidamlilik va tezkorlikni rivojlantirish samaradorligi mashg'ulot jarayonining tizimliliigi, maqsadga yo'naltirilganligi, texnik tayyorgarlik bilan uzviy bog'liqligi hamda pedagogik nazoratning to'g'ri yo'lga qo'yilganiga bog'liq. Ushbu metodika yosh kurashchilarning jismoniy salohiyatini oshirish, sport natijalarini yaxshilash va ularning uzoq muddatli sport rivojlanishini ta'minlashda muhim ahamiyat kasb etadi.

Kalit so'zlar: yosh kurashchilar, chidamlilikni rivojlantirish, tezkorlik sifatleri, kurash metodikasi, jismoniy tayyorgarlik, sport pedagogikasi, mashg'ulot jarayoni, sport natijadorligi.



Introduction

In the modern system of sports education, the preparation of young wrestlers requires a balanced combination of technical, tactical, psychological, and physical training. Among the many components of athletic preparedness, endurance and speed occupy a particularly important place because they directly influence the athlete's ability to perform effectively during both training and competition. Wrestling is a dynamic and highly demanding sport in which success depends on the capacity to execute explosive actions, maintain movement intensity, resist fatigue, and respond quickly to the opponent's changing behavior. For this reason, the methodological development of endurance and speed qualities in young wrestlers has become one of the central tasks of sports pedagogy and training theory.

At an early stage of athletic formation, young wrestlers undergo intensive physical and functional development. This period is especially favorable for improving the basic motor qualities that later serve as the foundation for specialized sports mastery. However, the training process for adolescents cannot simply replicate the methods used in adult elite sport. Young athletes differ in their anatomical, physiological, and psychological characteristics, and these differences require age-sensitive methodological decisions. Excessive physical loads, poorly distributed work-rest intervals, or an overemphasis on competitive results may negatively affect health, motivation, and long-term athletic growth. Therefore, endurance and speed training for young wrestlers must be organized in accordance with developmental principles, pedagogical appropriateness, and gradual adaptation.

Endurance in wrestling should not be understood only as the ability to continue activity for a long time. In this sport, endurance includes the capacity to preserve technical precision, tactical awareness, muscular coordination, and emotional stability under conditions of repeated effort and fatigue. During a bout, a wrestler must perform gripping actions, attacks, counterattacks, transitions, and defensive maneuvers without a noticeable decline in efficiency. Speed, in turn, is expressed not merely in fast running or quick isolated movements, but in the rapid execution of sport-specific actions such as reaction to an opponent's attack, initiation of offensive combinations, directional changes, and explosive technical entries. Thus, both qualities are closely interconnected and must be developed in unity with wrestling technique.

The relevance of this topic is also determined by the growing demand for scientifically grounded training models in institutions of higher pedagogical and



sports education. Coaches and future specialists in sports education need methodological tools that help them plan training sessions more effectively, differentiate exercises according to age and readiness level, and create conditions for the sustainable development of young athletes. In this context, the methodology of developing endurance and speed should include a rational selection of exercises, regulation of volume and intensity, monitoring of functional readiness, and the pedagogical integration of general and special preparation.

A well-designed methodology contributes not only to improved physical performance, but also to discipline, self-regulation, confidence, and motivation among young wrestlers. When endurance and speed are developed systematically, athletes become more capable of mastering complex technical actions and maintaining high activity throughout a match. Therefore, the study of this methodological issue has both theoretical and practical significance for the improvement of wrestling training in educational and sports institutions.

Methods

The methodology for developing endurance and speed qualities in young wrestlers was based on the principles of systematic training, age appropriateness, gradual progression, specificity, and pedagogical control. In wrestling education, methods cannot be selected randomly, because each physical quality develops most effectively under carefully regulated conditions. For this reason, the training process was designed as an integrated pedagogical system in which endurance and speed were cultivated through a combination of general physical preparation, special wrestling drills, functional exercises, and situational tasks closely related to competitive activity.

The first methodological principle was the consideration of age-related development. Young wrestlers are in a phase of ongoing growth of the musculoskeletal, cardiovascular, and nervous systems. Therefore, the load parameters were adjusted to match the athletes' functional capacities. Training emphasized safe but progressive stimulation rather than maximal exertion. At the early stages, greater attention was given to general endurance through running exercises, relay activities, circuit training, and game-based tasks that maintained interest and reduced monotony. At the same time, speed was developed through short bursts of movement, reaction drills, rapid



changes of position, and technically simple explosive exercises that did not overload the body.

The second principle was the integration of general and special preparation. General endurance was formed through aerobic and mixed-intensity activities such as moderate-distance running, repeated movement sequences, bodyweight complexes, and partner exercises. These activities strengthened the functional base necessary for sustained work. Special endurance, however, was trained through wrestling-specific tasks including repeated takedown attempts, grip fighting under time pressure, short sparring bouts with limited rest, and continuous technical combinations executed at a controlled but demanding pace. This helped athletes adapt to the real energetic demands of wrestling. In the same way, general speed was supported by sprint drills, agility ladders, jump exercises, and coordination patterns, while special speed was improved through rapid attack initiation, counterattack drills, movement transitions, and reaction-based partner work.

The third principle involved the use of interval and variable methods. For endurance development, interval training was applied in forms such as repeated bouts of moderate or high-intensity activity followed by incomplete recovery. This method increased the body's resistance to fatigue and improved the capacity to recover between wrestling exchanges. Variable-intensity exercises were also used so that athletes learned to adapt to changing tempos, which is essential in wrestling contests. For speed development, repeated short-duration exercises with full or near-full recovery were introduced. The purpose was to ensure high-quality execution of fast movements without fatigue-related distortion. Exercises lasted only a few seconds but demanded maximal concentration, precision, and neuromuscular coordination.

An important methodological element was exercise variation. Young wrestlers respond more positively to diverse and engaging training tasks than to monotonous repetition. Therefore, endurance and speed were developed through games, obstacle courses, competitive drills, paired contests, and technically meaningful challenges. This increased emotional involvement and motivation while preserving pedagogical effectiveness. The educational character of training was also emphasized: athletes were taught correct breathing, pacing strategies, movement economy, and self-control during exertion.

Pedagogical monitoring formed the final methodological component. Coaches observed heart rate response, movement quality, recovery behavior, and emotional



readiness in order to regulate individual loads. The methodology therefore relied not only on planned exercises, but also on constant feedback, ensuring that endurance and speed development occurred in a safe, targeted, and sport-specific manner.

Results

The implementation of a structured methodology for developing endurance and speed qualities in young wrestlers demonstrated positive pedagogical and athletic outcomes. The training process, based on gradual progression, age-appropriate load regulation, and the integration of general and special exercises, created favorable conditions for improving the athletes' functional readiness and motor performance. As a result, young wrestlers showed more stable work capacity during training sessions, better tolerance to repeated efforts, and improved execution of quick wrestling actions under physically demanding conditions.

One of the primary outcomes was the noticeable improvement in endurance-related performance. Athletes became more capable of sustaining activity over the full duration of training tasks and sparring sessions without a significant decline in movement quality. In earlier stages of training, fatigue often reduced the sharpness of attacks, coordination of defensive reactions, and the ability to maintain tactical discipline. After the systematic application of endurance-oriented methods, wrestlers were better able to preserve movement accuracy, tempo, and concentration even in the latter phases of intensive work. This suggests that the training model contributed not only to general functional adaptation, but also to the preservation of wrestling efficiency under load.

Improvements were also observed in speed qualities. Young wrestlers began to respond more quickly to external signals, initiate offensive actions with greater promptness, and perform technical movements more rapidly and confidently. Short explosive drills, reaction-based partner exercises, sprint elements, and high-tempo technical combinations produced a clear enhancement in movement frequency and speed of execution. The athletes demonstrated faster changes of stance and direction, improved coordination during attacking entries, and greater readiness in transitional phases between offense and defense. These developments are especially important in wrestling, where success often depends on fractions of a second and the timely use of tactical opportunities.



Another significant result was the increased interaction between physical development and technical preparedness. As endurance and speed improved, young wrestlers were able to perform learned techniques with greater consistency. Technical combinations could be repeated more often without severe fatigue, and movement patterns became more stable in dynamic conditions. This confirms that physical qualities in wrestling should not be developed in isolation, but in close connection with the sport's technical and tactical requirements. The methodology allowed physical training to support technical mastery rather than compete with it.

The results also revealed positive educational effects. Young wrestlers became more disciplined in completing training tasks, more attentive to coach instructions, and more motivated during demanding exercises. The use of varied methods, including game-like tasks, interval drills, and situational partner work, reduced emotional fatigue and maintained interest in the training process. Athletes displayed greater confidence during sparring and were more willing to engage actively throughout the session. This indicates that an effective methodology for endurance and speed development also strengthens the pedagogical environment of sports training.

Overall, the observed results confirm that a scientifically organized and pedagogically controlled methodology can significantly improve the physical readiness of young wrestlers. The combined development of endurance and speed enhanced both functional capacity and sport-specific performance, creating a stronger foundation for further athletic growth.

Discussion

The development of endurance and speed qualities in young wrestlers should be viewed as a multidimensional pedagogical process rather than a narrow set of physical exercises. The findings of this study indicate that these qualities are formed most effectively when training is organized systematically, aligned with age-related characteristics, and closely connected with the technical and tactical content of wrestling. This confirms an important theoretical position in sports pedagogy: physical training achieves its highest value when it functions not independently, but as a structural component of overall athletic preparation.

One of the main issues emerging from the analysis is the need to avoid mechanical transfer of adult training models into youth wrestling practice. Young wrestlers differ significantly from mature athletes in terms of functional stability, recovery capacity,



emotional regulation, and motor learning. When coaches rely on excessive volume, high monotony, or premature specialization, the result may be overfatigue, decreased motivation, and incomplete long-term development. In contrast, the methodology examined in this article emphasizes gradual load progression, controlled intensity, exercise diversity, and educational guidance. This approach is more compatible with the pedagogical objectives of sports education, especially in institutions responsible for forming both athletic skills and healthy personality development.

The interaction between endurance and speed deserves special attention. These qualities are sometimes trained separately, yet in wrestling they function in continuous relationship. A wrestler may possess quick reactions and explosive movements, but without sufficient endurance these advantages decline rapidly as fatigue accumulates. Conversely, endurance without adequate speed limits the athlete's ability to exploit tactical openings and execute techniques effectively. The discussion therefore supports the idea that coaches should not isolate these qualities in a rigid manner. Instead, training should combine them through exercises that reflect real wrestling situations, where repeated bursts of speed occur under conditions of growing physiological strain. This is particularly important for preparing young wrestlers to meet the complex energetic and coordinative demands of competition.

Another important pedagogical conclusion concerns motivation and emotional engagement. Young athletes respond more positively to training that includes variation, challenge, and meaningful movement tasks. Methods such as relay competitions, reaction games, partner drills, and situational wrestling exercises not only improve physical qualities, but also sustain interest and active participation. This is especially valuable in the educational context, where the long-term retention of athletes depends on positive training experiences as much as on competitive success. Therefore, methodological effectiveness should be measured not only by physical outcomes, but also by the degree to which training supports enthusiasm, self-confidence, and discipline.

The discussion also highlights the significance of monitoring and individualization. Even within the same age group, young wrestlers differ in biological maturity, coordination level, emotional resilience, and adaptive response to training loads. For that reason, the methodology for developing endurance and speed cannot remain fixed or universal. It must be responsive, allowing the coach to adjust work-rest ratios,



exercise complexity, and intensity in accordance with the athlete's current condition. Such pedagogical flexibility increases both safety and effectiveness.

In a broader perspective, the methodology discussed in this article has relevance for the preparation of future sports educators and wrestling coaches in pedagogical universities. It offers a framework that combines scientific knowledge, teaching logic, and practical training principles. By integrating endurance and speed development into a coherent system of youth wrestling preparation, coaches can create stronger conditions for sustainable athletic progress and more effective educational influence.

Conclusion

The methodology for developing endurance and speed qualities in young wrestlers represents an essential component of the modern training system in sports education. The analysis presented in this article demonstrates that these physical qualities are not auxiliary elements of preparation, but fundamental conditions for successful technical, tactical, and competitive performance. In wrestling, where actions are performed under conditions of high intensity, rapid decision-making, and repeated physical effort, the athlete's capacity to maintain work efficiency and act quickly becomes a decisive factor. For this reason, endurance and speed should be developed from the early stages of sports specialization through a scientifically grounded and pedagogically organized process.

The study confirms that the most effective methodology is based on several interconnected principles. These include age appropriateness, gradual progression of training loads, the unity of general and special physical preparation, exercise variability, regular monitoring, and the close integration of physical development with wrestling technique. Such a methodology allows coaches to avoid common mistakes associated with excessive load, narrow specialization, and monotonous training. Instead, it creates favorable conditions for safe adaptation, sustainable physical growth, and improved competitive readiness. In young wrestlers, this is particularly important because the goal of training is not only short-term result achievement, but also the creation of a reliable foundation for long-term athletic development.

The article also establishes that endurance and speed should not be trained as isolated qualities. In practical wrestling activity, they function in interdependence. Speed is necessary for explosive attacks, counteractions, and tactical reactions, while endurance ensures the preservation of these capacities throughout the entire bout and



across repeated training tasks. Their combined development makes technical actions more stable, improves the quality of tactical behavior, and increases the athlete's resilience in demanding situations. Therefore, the methodology of training must reflect the real structure of wrestling performance, where physical qualities are expressed through complex and changing motor tasks.

An additional conclusion concerns the educational significance of the training process. Properly organized endurance and speed development contributes not only to physical fitness, but also to discipline, responsibility, persistence, and self-confidence in young athletes. When training includes diverse, engaging, and meaningful tasks, it supports motivation and helps maintain positive attitudes toward sport. This pedagogical effect is especially relevant for institutions of sports education, where the formation of personality is inseparable from the formation of athletic competence.

Thus, the methodology for developing endurance and speed qualities in young wrestlers should be regarded as a strategic direction in wrestling pedagogy. Its effectiveness depends on the rational combination of physiological knowledge, methodological accuracy, and pedagogical sensitivity. The implementation of such an approach can significantly improve the quality of youth wrestling preparation and provide future athletes with stronger opportunities for both sporting achievement and personal development.

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