



EDUCATION OF THE ENDURANCE OF TEENAGERS ENGAGED IN ATHLETICS (ON THE EXAMPLE OF SECTIONS

Mamasoliyevich Sabir Sidikov

Dosent of the Faculty of Physical Culture of Fergana State University

Nabiyev Sodir Marubjanovich

Ferghana State University Master of the 2st
year of the Faculty of Physical Culture

Annotation

This article is devoted to a popular sport – athletics. The significance of this sport is considered, the influence of various means of athletics is determined. As well as the development of physical qualities of athletes.

Key words: Physical education, athletics, student youth, sports, activities, criteria, exercises, qualities.

Currently, a lot of problems have accumulated in middle-distance running for men: the number of our athletes in the lists of the strongest in the world is decreasing, there are few new names in the national team of the country. And there are reasons for that. Young coaches, wanting to prove themselves quickly, forget about the versatile training of their students, forcing their training. At competitions, it is often noticeable that even young athletes are overweight, weak musculoskeletal system, low technical, functional and physical fitness. There is also a low motivation of athletes to achieve high results. It is no accident that they are afraid of starts, and their competitive activity is unstable.

To a greater extent, the reason for this is also the lack of training programs, recommendations for the preparation of young athletes for long distances, not enough publications in the literature, and often, the unavailability of information. This work is an attempt on the basis of theoretical knowledge on the development of endurance, the training of athletes – runners at medium distances and a brief analysis of the practical activities of athletes will allow to formulate the main directions in the activities of the coach and indicative moments in the training of young runners at medium and distance.

In the conditions of modern civilization, in conditions of a decrease in natural motor activity, systematic physical exercises should be considered the most effective, purposeful effect on the body. Sports training provides enhanced growth of muscle performance. As the fitness of the body increases, muscle performance increases accordingly. Young athletes, in comparison with their peers who do not play sports, have greater efficiency, endurance. Moreover, the older the age of young athletes and the higher the qualification, the greater the difference between athletes and non-athletes.

Skeletal muscles are the main apparatus by which physical exercises are performed. A well-developed musculature is a reliable support for the skeleton. For example, with pathological curvature of the spine, deformities of the chest (and the reason for this is the weakness of the muscles of the back and shoulder girdle), the work of the lungs and heart becomes difficult, the blood supply to the brain worsens, etc.



Trained back muscles strengthen the spinal column, unload it, taking part of the load on themselves, prevent the "loss" of intervertebral discs, slipping of the vertebrae. If the muscles are doomed to long rest, they begin to weaken, become flabby, decrease in volume. Systematic athletics activities contribute to their strengthening. At the same time, muscle growth does not occur due to an increase in their length, but due to the thickening of muscle fibers. Muscle strength depends not only on their volume, but also on the strength of nerve impulses entering the muscles from the central nervous system. In a trained person who is constantly engaged in physical exercises, these impulses cause muscles to contract with greater force than in an untrained person.

Under the influence of physical activity, the muscles not only stretch better, but also become firmer. Athletics contribute to better nutrition and blood supply to the muscles. Along with the increase in working capacity, young athletes' ability to maximize oxygen consumption increases. Under the influence of systematic sports, aerobic performance increases, especially in girls who play sports. Systematic sports significantly increase aerobic performance in young athletes. Aerobic performance is also influenced by the nature of the exercises performed. Young athletes engaged in cyclic sports have a higher MPC than representatives of acyclic sports.

Absolute indicators and growth rates of special strength in 17- to 18-year-old boys who do not play sports, and in young athletes differ significantly - in the former they are lower. For example, non-athletes with simultaneous pushing off with their hands have force indicators lower by 12.09 kg (29%), with alternating pushing off with their hands - by 14.43 kg (25%) and with pushing off with their foot - by 36.92 kg (20%). Athletes from 13-14 to 17-18 years old have a sharp jump in the development of repulsion power indicators. For people who do not engage in sports, during this period, its growth rate is not significant.

The data of age-related patterns of the development of special strength indicators in young athletes and schoolchildren who do not engage in sports should be taken into account when planning the means and methods of their education in the course of training sessions. The education of endurance by influencing anaerobic capabilities is based on the adaptation of the body to work in conditions of accumulation of under -oxidized energy products and is characterized by the solution of two tasks: 1) increasing the power of the glycolytic (lactate) mechanism; 2) increasing the power of the creatine phosphate (alactate) mechanism. For this purpose, basic and specially prepared exercises of appropriate intensity are used. In this case, repeated and variable interval exercises are used.

The following requirements apply to exercises used as means of improving the glycolytic mechanism. The work should be performed with an intensity of 90-95% of the maximum power for this segment of the distance, the duration of work is from 20 seconds to 2 minutes (the length of the segments is from 200 to 600 m in running; from 50 to 200 m in swimming). The number of repetitions in the series for beginners is 2-3, for well-prepared 4-6. Rest intervals between repetitions gradually decrease: after the first – 5-6 minutes, after the second – 3-4 minutes, after the third – 2-3 minutes. There should be a rest between the series to eliminate lactate debt in 15-20 minutes. The following requirements apply to exercises used as a means of improving the creatine phosphate mechanism. The intensity of the work should be near the limit (95% of the maximum); the duration of exercises – 3-8 seconds (running – 20-



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70 m, swimming – 10-20 m); rest intervals between repetitions – 2-3 minutes, between series (each series consists of 4-5 repetitions) – 7-10 minutes. The rest intervals between the series are filled with exercises of very low intensity, the number of repetitions is determined based on the preparedness of those involved.

The development of aerobic and anaerobic capabilities is combined with each other. Glycolysis depends on the respiratory capabilities and at the same time is itself the basis for the alactate process. Based on this, it is advisable to plan the preferential development of these opportunities in the following sequence in the system of classes: aerobic – lactate – alactate. In the course of one lesson, the solution of endurance training tasks should occur in reverse order.

At the age of 13-17 years, the rapid development of the body occurs. During this period, strength accumulates, dexterity is acquired, endurance increases, the work of all organs increases, especially the state of the nervous system, the activity of the cardiovascular and respiratory systems changes. By the age of 15, ossification of the vertebral column, chest, pelvis and limbs does not end. The ligamentous apparatus is more elastic than in adults, so you should not do large muscle strains. Muscle tissue grows more vigorously in boys aged 16-17, the activity of the cardiovascular system becomes more perfect. The pulse slows down, blood pressure decreases, the stroke volume of the heart approaches the volume of adults, the speed of blood movement decreases.

It is during this period that the harmonious development of muscles is very important, because a unilateral increase in one group can lead to uneven development of internal organs and disruption of their functions. At this age, you can significantly increase physical activity, actively develop special endurance and strength qualities. The problem of improving endurance from childhood is one of the most important in physical education and sports training. The education of endurance for sports purposes should contribute to the massive strengthening of the health of the younger generation, which is especially important in connection with the hypokinesia in school-age children, aggravated by the acceleration of physical development. Running is an effective and accessible means of physical improvement for all ages, contributing to the improvement of health and harmonious development. However, the problem of sports training of young runners has been causing controversy and disagreement among coaches and researchers for many years. The main contradictions relate to the initial, basic stages of sports training, covering children and youth, namely, these stages are of leading importance for achieving high sports results. It is well known that achieving high athletic results in most sports, especially those associated with prolonged cyclical locomotor activity, is impossible without a high level of endurance development. Currently, high athletic results in endurance running have become available for girls aged 16-17 and boys aged 18-19.

At the same time, this is not an obstacle to improving results when they move into the category of adult athletes. Modern age physiology, biochemistry and morphology have accumulated significant experimental material on certain issues of endurance development in ontogenesis in connection with age-sexual characteristics of the organism. It is also known that this age is favorable for the development of speed of movement. However, in the theory of physical education, the issues of improving endurance for sports purposes in children, adolescents, boys and girls have not yet been



studied sufficiently and systematically. All this determined the purpose of our work - to investigate the patterns of age-related development of endurance and experimentally substantiate the process of promising, systematic training in endurance running for children, adolescents, boys and girls.

The complexity and versatility of the problem has led to the need to build the work in the form of a number of separate studies conducted in two main directions. The first direction is connected with the study of age-related changes in endurance in its various manifestations in non-athletes-schoolchildren. The second is with the research and experimental substantiation of the methods of training young runners at distances requiring endurance. Starting the study, we hoped that the establishment of age-related patterns of endurance development and biological factors that cause them would allow us to purposefully apply the recommended means and methods of training, depending on the age, gender and qualifications of young athletes. The purpose of the study required solving a number of specific tasks put forward on the basis of generalization of many years of personal experience working with young runners, as well as scientific, theoretical and practical data on the problem of running training and endurance education at school age. Running is a cyclical locomotor exercise of a global nature and requires the manifestation of general, special endurance and other motor qualities. In this regard, we were interested in the quantitative characteristics of the factors that ensure success in running among novice athletes.

To solve this problem, we determined the change in the result at 600 m and its relationship with age, level of motor qualities and physical development in 125 novice runners aged 11-16 years. It was found that the result in the 600 m run at this age varies significantly. However, these changes occur unevenly: the highest average annual growth rates were found in 12, 14 and 16 years. At the age of 15, there is a decrease in results, but it is statistically unreliable. The most closely related to the result is the level of endurance development according to the speed reserve indicator proposed by N.G. Ozolin. Speed is reliably associated with the result only up to the age of 14, and strength - at 13 and 16 years. The result in the 600 m run at the age of 11 and 16 is closely related to anthropometric indicators, the WEL does not affect this result, while the relative WEL is significantly related to the result at all ages, with the exception of 13 and 16 years. Thus, the result in middle-distance running for beginners is correlated with most of the studied indicators, but the nature of this dependence, especially its changes, varies with age.

Up to 15 years of age, speed and strength, along with endurance, significantly affect the result in running for beginners. At the age of 15, they begin the process of differentiating the influence of physical qualities on the result. In the future, one quality remains the leading one - endurance. The established close correlation of endurance with the result in running at 600 m at all ages served as a prerequisite for further, more in-depth research of this motor quality. In this regard, we investigated the age dynamics of changes in endurance and its relationship with physical development and motor qualities in various zones of work capacity and with static efforts in 832 schoolchildren aged 9-17 who are not involved in sports. The change in endurance indicators for schoolchildren and schoolgirls in running of submaximal, large and moderate power occurs differently: boys have the greatest increase at 13-14 years, and girls have endurance indicators for submaximal and high power work increase to 14 years,



endurance for moderate power work (running in combination with walking for 35 minutes) with age changes insignificantly.

The indicators of endurance to static efforts and to maximum power work in boys and girls improve slightly with age. The total indicators of age-related changes in endurance are 28% for schoolchildren, 21% for schoolgirls, at the same time, the total indicators of strength increase by 177 and 107%, respectively. The lag in the development of endurance in comparison with strength shows the insufficient use of running and other natural locomotives aimed at educating this important quality at school age. The age dynamics of physical development and motor qualities established by us fully characterizes the formation of the body of schoolchildren who do not engage in sports, and their difference from the development of young athletes.

The results of statistical processing reveal a significant unevenness of development, as well as periods of the greatest gains. Puberty period of puberty has a special influence on physical development and improvement of motor qualities. Thus, the main factors affecting the development of endurance in schoolchildren who do not play sports are age, gender and biological changes occurring in the body during puberty. Correlation analysis of indicators of physical development and the level of motor qualities showed that the manifestation of endurance in most age groups of schoolchildren is not interrelated with body length indicators, and tends to have a negative relationship with body weight, chest circumference and a multidirectional relationship with the degree of puberty. According to our data, the endurance indicators of schoolchildren to work in the zones of submaximal, high and moderate power have a high degree of interrelation. The relationship of endurance with the indicators of speed and speed-strength qualities weakens as the power of work decreases (the length of the distance), and girls have broader relationships of physical qualities than boys. The manifestation of endurance to work with maximum power and static endurance correlates very weakly with indicators of other physical qualities.

So, the results of intercorrelation allowed us to establish that endurance in four zones of relative power and under static loads in schoolchildren at most ages has no reliable links with physical development and other motor qualities. This served as a prerequisite for the study of the dependence of endurance on the functional capabilities of the body. We paid special attention to the study of the manifestation of endurance in running of submaximal power (since middle distances belong to this zone of work power) and its relationship with the activity of the oxygen supply systems of the body. At the same time, for 349 boys aged 10-17, we chose to determine the length of the distance covered at a speed of 75% of the maximum, and for 1019 girls aged 8-17, the distance covered in 90 seconds. Both of these indicators have been tested by us and objectively reflect the level of development of the quality studied at all ages.

The following periods are distinguished in dynamics: the first (10-12 years) - stabilization of endurance; the second (13-14 years) - a sharp increase in it; the third (15-16 years) - a decrease in the level of endurance; the fourth - the period of the second increase, when endurance indicators tend to increase again. The increase in endurance in schoolchildren aged 13-14 is explained by high motor activity at



this age, the beginning of intense puberty and the associated rapid increase in physical development indicators.

This is also facilitated by a significant increase in absolute and relative MPC and an increase in oxygen consumption values. At this age, pulmonary ventilation improves, the respiratory rate decreases and its depth increases. The deterioration of endurance at the age of 15-16 is explained by a decrease in motor activity, the absence of significant gains in physical development indicators, the attenuation of changes associated with puberty, a decrease in the increase in indicators of maximum oxygen consumption and pulmonary ventilation.

The improvement of endurance at the age of 17 is caused by the gradual approach of young men at this age in general development and development of qualities (including endurance) to the level of adults, a new increase in absolute and relative BMD and an increase in the percentage of oxygen consumption. In girls and girls in the first period (10-13 years) there is a sharp increase in endurance; in the second (13-15 years) - a slight decrease in the intensity of growth, but in general the increase continues; in the third (15-16 years) - a slight decrease in endurance; in the fourth (17 years) - a significant decrease in endurance, especially compared to the indicators of 13-14-year-olds. Studies of the development of functional capabilities of oxygen supply systems in girls and girls have shown that up to the age of 13 there is an intensive development of all indicators characterizing the activity of the cardiorespiratory system, with the greatest increase in their formation occurring at 12-13 years. After this significant increase in MPC indicators, such as the percentage of oxygen consumption and pulmonary ventilation, no changes are observed.

The solution of the main task of our research - the justification of the long-term training process of young runners - we started by determining the dependence of the result in middle-distance running on the level of physical development and fitness of runners aged 13-19 years and older and qualifications - from beginners to masters of sports. It was found that the indicators of anthropometry, speed, strength and speed-strength qualities of athletes have a statistically significant increase up to 17-18 years, and endurance indicators improve with advanced training. By means of correlation and regression analyses, it was found that in all age groups, the result in the 800 m run is due to the combined influence of special endurance and speed. General endurance, speed and strength have an indirect effect on the result through special endurance.

The age for starting classes and specialization in running was justified during a pedagogical experiment aimed at identifying the effects of loads and means of educating motor qualities in children (10-12 years old), adolescents (13-14 years old) and young men (15-17 years old). The results of studying the characteristics of the reactions of the body of young runners of different ages and the level of puberty served as a justification for the age limits of the stages of their long-term training. Based on the expediency of starting running at the age of 10-12 years, the following experiment was conducted with the participation of 45 boys and 51 girls. Four variants of the construction of the initial training stage, which are most common in practice, were tested.

The results of the study allowed us to establish the most positive effect of the variant in which 50% of the training time was devoted to endurance training using low-intensity loads - running in



combination with walking at a heart rate of 150-170 beats / min, interspersed with mobile and sports games in the air. Based on the studies conducted, we recommend that boys and girls primarily use such a load in running, in which oxygen debt and hypoxia conditions would not be created. It is necessary that the exercises are performed in a truly stable state and only by the end of the lessons for a short time would an oxygen debt be created, the consequences of which should then be eliminated by using the influence of natural locomotives of moderate power. The effectiveness of prolonged running is determined by the beneficial effects and gradual improvement of the functions of the cardiovascular and respiratory systems, an increase in the volume of the heart and lungs, an increase in the oxygen capacity of the blood, and an improvement in metabolic processes in tissues. All this improves the regulation of body functions and leads to the economization of their activity during physical exertion.

At the stage of preparation for the specialization of boys and girls aged 11-13 years, 117 schoolchildren had three different load modes aimed at improving endurance: long running of low intensity, running on segments with medium intensity, running on short segments with high intensity. The data of control measurements obtained a year later allowed us to establish that the level of general physical fitness significantly increased in all those involved, and those who used running with low intensity, the result in running for 6 and 35 minutes was significantly higher than the rest. The means, methods and load regimes used during the pedagogical experiment had a positive effect on the body of boys and girls in general.

The results of the experiment indicate the versatile influence of such loads and good adaptation to them. In the future, the object of experimental research in determining the effectiveness of complex sequential and parallel education of endurance, speed and strength were 24 adolescents 13-14 years old, united by age, puberty and physical development in two equivalent experimental groups. Analysis of the results of the experiment showed that with the same time allocated to the education of endurance, speed and strength of 13-14-year-old runners, a consistent approach to their improvement is more effective. The established sequence in the education of qualities allows for the improvement of sports results to achieve greater results in terms of performance, endurance, strength and speed than with the parallel education of these qualities.

The stage of in-depth specialization in endurance running begins at the age of 15-16 years and is characterized by an increase in the volume and intensity of training loads, improvement of special physical fitness, technique and tactical skill of runners. The study of training methods was preceded by an analysis of the volume and intensity of the load according to a special scheme compiled taking into account the recommendations of F.Suslov, V.Zatsiorsky, S.Dedkovsky. This scheme was based on the "critical velocity" when assessing the intensity. Further research was devoted to determining the impact of various load modes aimed at improving special endurance at the stage of advanced specialization of young runners. 52 young athletes took part in a series of experiments conducted in natural conditions of training, including runners of the second and first categories and candidates for master of sports.

The analysis of the results of the study revealed the peculiarities of the body's response to different volume and intensity of the load during the repeated method of training and differences in heart rate and blood pressure with the same work performed by repeated and variable methods.



LITERATURE

1. Ashurali, B., & Alisher, T. (2022). THE IMPACT OF CHANGES IN THE RULES AND EQUIPMENT ON THE RESULTS OF ATHLETES IN THE CHOSEN SPORT (ATHLETICS). *Academicia Globe: Inderscience Research*, 3(11), 4-15.
2. Bokiev, A., Abduganiev, I., & Toshpulatov, A. (2022). The innovation in improving the effectiveness of teaching training techniques of light athletics. *Asian Journal of Multidimensional Research*, 11(5), 316-319.
3. Мирзакаримова, Н. (2022). ТРИГОНОМЕТРИК АЙНИЯТЛАРНИ МАТЕМАТИК ИНДУКЦИЯ МЕТОДИ ЁРДАМИДА ИСБОТЛАШНИНГ АФЗАЛЛИГИ. *BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI*, 2(11), 431-435
4. Mirzakarimova, N. M. (2022). FEATURES OF FORMATION OF STUDENTS' TECHNICAL THINKING ABILITIES WHEN CHOOSING THE CONTENT OF MATHEMATICAL EDUCATION IN ACADEMIC LYCEUMS. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(12), 362-366.
5. Tohtasinova Nafisa Imomovna, Akbarova Sevara Husanboy qizi. (2023). APPLICATION OF INTERACTIVE TEACHING METHODS IN MATHEMATICS LESSONS. *Academicia Globe: Inderscience Research*, 4(01), 86-93.
6. Orifjon, M. (2021). NO ONE CAN MAKE THE COUNTRY FAMOUS IN SPORTS. *Galaxy International Interdisciplinary Research Journal*, 9(12), 908-911.
7. Nishanbayevich, M. O. (2022). Outdoor Games in The System of Physical Culture and Sports in Higher Education. *Texas Journal of Multidisciplinary Studies*, 5, 18-20.
8. Хасанов, А. Т. (2017). Физическая культура и спорт как важный аспект в формировании личности. *Молодой ученый*, (11), 527-529.
9. Хасанов, А. Т. (2017). Физическая культура-надежда нации. *Молодой ученый*, (12), 591-592.
10. Хасанов, А. Т., Юсупов, Т. Т., & Алломов, Э. И. (2020). ПОДГОТОВКА СПЕЦИАЛИСТОВ ФАКУЛЬТЕТА ВОЕННОГО ОБРАЗОВАНИЯ К ПРОФЕССИОНАЛЬНО-ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ. *European Journal of Humanities and Social Sciences*, (1), 108-113.
11. Sabirovna, S. G. (2022). PHYSICAL CULTURE AND DEVELOPMENT OF PHYSICAL SCHOOL CHILDREN. *Conferencea*, 17-27.
12. Sabirovna, S. G. (2022). DEVELOPMENT OF PHYSICAL QUALITIES OF A PRESCHOOL CHILD. *Conferencea*, 59-71.
13. Sabirovna, S. G. (2022, November). FEATURES OF THE DEVELOPMENT OF PHYSICAL QUALITIES IN PRIMARY SCHOOL AGE. In *E Conference Zone* (pp. 71-84).
14. Mamasoliyevich, S. S. (2022). DEVELOPMENT OF PHYSICAL QUALITIES OF PRESCHOOL CHILDREN. *American Journal of Interdisciplinary Research and Development*, 10, 27-37.
15. Mamasoli, S. S., & Marubjanovich, N. S. (2022). " EDUCATION OF ENDURANCE OF YOUTH ENGAGED IN ATHLETICS. *Scientific Impulse*, 1(3), 1118-1125.
16. Ibragimovich, A. E. (2022). DEVELOPMENT OF PHYSICAL QUALITIES IN ATHLETICS IN THE SYSTEM OF PHYSICAL EDUCATION OF STUDENTS. *Uzbek Scholar Journal*, 11, 122-128.



17. Ibragimovich, A. E. (2022). Athletics at a Higher Educational Institution. *American Journal of Social and Humanitarian Research*, 3(10), 83-88.
18. Tursinovich, H. A., Ibrokhimovich, A. E., & Tavakkalovich, A. D. (2022). Features of the interdependence of indicators of physical status of students of I-IV stages of military education faculties. *Texas Journal of Multidisciplinary Studies*, 7, 58-61.
19. Namozova, D. T. (2021). MUSIQA DARSLARIDA O'QUVCHILARNI KREATIVLIK HAMDA ERKIN TAFAKKURINI SHAKLLANTIRISHNI TASHKIL ETISH. *Scientific progress*, 2(2), 1313-1315.
20. Namozova, Dilorom Tursunovna (2022). RENESSANS-BO'LAJAK MUSIQA O'QITUVCHISINING KOMPETATSION TAKOMILI SIFATIDA. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2 (10-2), 491-496.
21. D. Namozova (2022). BO'LAJAK MUSIQA O'QITUVCHILARINING KREATIV KOMPETENTLIGINI MUSIQA TARIXI FANINI O'QITISH VOSITASIDA SHAKLLANTIRISH. *Science and innovation*, 1 (B6), 942-950. doi: 10.5281/zenodo.7195688
22. Namozova, Dilorom, & Astanova, Zumradxon Tohirovna (2022). BRAYL NOTA TIZIMINING MUSIQA TA'LIMIDAGI ILK QADAMLARI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2 (10-2), 260-264.
23. Хасанов, А. Т., Юсупов, Т. Т., & Алломов, Э. И. (2020). ПОДГОТОВКА СПЕЦИАЛИСТОВ ФАКУЛЬТЕТА ВОЕННОГО ОБРАЗОВАНИЯ К ПРОФЕССИОНАЛЬНО-ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ. *European Journal of Humanities and Social Sciences*, (1), 108-113.
24. Tursinovich, H. A., Ibrokhimovich, A. E., & Tavakkalovich, A. D. (2022). Features of the interdependence of indicators of physical status of students of I-IV stages of military education faculties. *Texas Journal of Multidisciplinary Studies*, 7, 58-61.
25. Allomov Erkin Ibragimovich. (2022). Athletics at a Higher Educational Institution. *American Journal of Social and Humanitarian Research*, 3(10), 83-88. Retrieved from <https://www.grnjournals.us/index.php/ajshr/article/view/1543>
26. Orifjon, M. (2021). NO ONE CAN MAKE THE COUNTRY FAMOUS IN SPORTS. *Galaxy International Interdisciplinary Research Journal*, 9(12), 908-911.
27. Nishanbayevich, M. O. (2022). Outdoor Games in The System of Physical Culture and Sports in Higher Education. *Texas Journal of Multidisciplinary Studies*, 5, 18-20.
28. Madaminov Oribjon Nishanbayevich. (2022). Volleyball as a Means of Developing Physical Qualities of University Students. *American Journal of Social and Humanitarian Research*, 3(10), 89-94. Retrieved from <https://www.grnjournals.us/index.php/ajshr/article/view/1544>
29. Madaminov, O. (2021). The role of the volleyball game in the system of physical education (A look at history). *Asian Journal of Multidimensional Research*, 10(10), 1472-1477.
30. Mamasoliyevich, S. S., Abdumalikovna, M. S., & Kholmatova, N. (2022). A Life Sacrificed in the Development of Social Life. *Kresna Social Science and Humanities Research*, 3, 152-156.
31. Abdumalikovna, M. S. (2022). Music As a Factor for The Formation of Social Identity in Youth. *Texas Journal of Multidisciplinary Studies*, 5, 21-24.



32. Ibragimovich, A. E. (2022). Athletics at a Higher Educational Institution. American Journal of Social and Humanitarian Research, 3(10), 83-88.
33. Ashurova, O. A. (2021). AESTHETIC EDUCATION AS A FACTOR OF PROFESSIONAL TRAINING OF PRESCHOOL TEACHERS IN A PEDAGOGICAL UNIVERSITY. Theoretical & Applied Science, (5), 425-427.
34. Ashurova, O. (2021). Analysis of foreign experience on the development of eco-aesthetic culture of future preschool education specialists. Asian Journal of Multidimensional Research, 10(10), 1478-1484.
35. Ashurova, O. A. (2021). SOCIO-HISTORICAL TRADITIONS OF DEVELOPMENT OF ECOESTHETIC CULTURE OF PRESCHOOL EDUCATIONAL PROFESSIONALS. CURRENT RESEARCH JOURNAL OF PEDAGOGICS, 2(05), 46-52.
36. Ashurova, O. (2021, December). THE IMPORTANCE OF AESTHETICITY OF ECOLOGICAL CONSCIOUSNESS AND CULTURE IN THE ACTIVITIES OF PRESCHOOL EDUCATIONAL PROFESSIONALS. In International Scientific and Current Research Conferences (pp. 88-90).
37. Anvarjonovna, A. O. (2021). Factors for the Development of Ecoesthetic Culture of Future Preschool Educational Professionals. European Journal of Humanities and Educational Advancements, 2(5), 162-164.
38. Anvarjonovna, A. O. (2021, December). Methodological Foundations for Development of Aesthetic Culture Teacher of Preschool Education. In INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY RESEARCH AND INNOVATIVE TECHNOLOGIES (Vol. 2, pp. 254-258).
39. Латипова, Н. И., & Журабоева, М. Д. (2021). РОЛЬ РИТМИЧЕСКОЙ ГИМНАСТИКИ В ДОШКОЛЬНОМ ОБРАЗОВАТЕЛЬНОМ УЧРЕЖДЕНИИ ДЛЯ ДОШКОЛЬНИКОВ. In Interdisciplinary Conference of Young Scholars in Social Sciences (pp. 135-140).
40. Tojimatovna, N. D. (2022, May). SOGLOM TURMUSH TARZI. In INTERNATIONAL SCIENTIFIC RESEARCH CONFERENCE (Vol. 1, No. 4, pp. 282-285).
41. Tojimatovna, N. D. (2022). TALABA QIZLARDA UMUMIY JISMONIY TAYYORGARLIK SALOMATLIKNI YAXSHILASHNING ASOSIY VOSITASIDIR. O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI, 1(8), 543-546.
42. Jalolov, S. V. (2021). Improvement of motor preparation of younger schoolers in the annual cycle of learning. In Приоритетные направления развития спорта, туризма, образования и науки (pp. 246-250).
43. Sidikova, G. S., & Ibrahimovich, T. A. (2021). FORMATION OF CHILDREN'S HEALTH CULTURE AS A SOCIAL AND PEDAGOGICAL PROBLEM. Conferencea, 71-74.
44. Сидикова, Г. С. (2022). ФОРМИРОВАНИЕ ЗДОРОВОГО ОБРАЗА ЖИЗНИ У ДЕТЕЙ СТАРШЕГО ДОШКОЛЬНОГО ВОЗРАСТА. TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI, 2(1), 6-11.
45. Sabirovna, S. G. (2021, November). FORMATION OF A HEALTHY LIFESTYLE FOR PRESCHOOLERS. In Archive of Conferences (Vol. 22, No. 1, pp. 44-48).



46. Туйчиев, А. И., & Сидикова, Г. С. (2022). ОРГАНИЗАЦИЯ ФИЗКУЛЬТУРНООЗДОРОВИТЕЛЬНОЙ РАБОТЫ С ДЕТЬМИ ДОШКОЛЬНОГО ВОЗРАСТА. JURNALI, 178.
47. Sabirovna, S. G., & Ibragimovich, T. A. (2022). Organization of Physical Culture and Recreation Work with Preschool Children.
48. Туйчиев, А. И., & Сидикова, Г. С. (2022). ИГРОВЫЕ ТЕХНОЛОГИИ И ИХ ЗНАЧЕНИЕ В РАЗВИТИИ И ВОСПИТАНИИ СОВРЕМЕННОГО ПОДРОСТКА. INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL, 3(6), 190-198.
49. Sabirovna, S. G. (2022). PHYSICAL CULTURE AND DEVELOPMENT OF PHYSICAL SCHOOL CHILDREN. Conferencea, 17-27.
50. Mamasoliyevich, S. S. (2022). DEVELOPMENT OF PHYSICAL QUALITIES OF PRESCHOOL CHILDREN. American Journal of Interdisciplinary Research and Development, 10, 27-37.
51. Sabir Mamasoliyevich, S. S., & Durdon Abdusamad qizi, J. S. (2022). METHODS OF PHYSICAL DEVELOPMENT OF PRESCHOOL CHILDREN. Scientific Impulse, 1(3), 1129–1135. Retrieved from <http://nauchniyimpuls.ru/index.php/ni/article/view/1257>
52. Kamolidin, P. (2021). Physical Preparation and Development of School Students. Journal of Pedagogical Inventions and Practices, 3, 161-163.
53. Tohtasinova Nafisa Imomovna, Akbarova Sevara Husanboy qizi. (2023). APPLICATION OF INTERACTIVE TEACHING METHODS IN MATHEMATICS LESSONS. Academica Globe: Inderscience Research, 4(01), 86–93
54. Saddixonov, A. A. (2022). MUSIQIY TA'LIMDA KOMPETATSION YONDASHUV. Oriental renaissance: Innovative, educational, natural and social sciences, 2(10-2), 572-577.
55. Mamasoliyevich, S. S., & Qodirova, X. (2023, January). JISMONIY TARBIYA VA SPORT JARAYONLARINING AMALIY VA NAZARIY VOSITALARI. In E Conference Zone (pp. 10-18).
56. Anvarjonovna, A. O. (2022). TECHNOLOGY OF DEVELOPMENT OF ECOESTHETIC CULTURE OF FUTURE SPECIALISTS OF PRESCHOOL EDUCATIONAL INSTITUTIONS. Emergent: Journal of Educational Discoveries and Lifelong Learning (EJEDL), 3(11), 7-12.
57. Adiljanovna, A. M., Nurullaevna, N. M., Abdumalikovna, Y. D., Sharobidinovich, M. J., Abdujalil Abduvalio'g'li, A., & Behzod Asqaralio'g'li, T. (2021). Academic Yunus Rajabi and His Scientific Heritage. Annals of the Romanian Society for Cell Biology, 9092-9100.
58. Abdumalikovna, Y. D. (2021). The Role and Importance of Culture and Art in The Development of Society. Zien Journal of Social Sciences and Humanities, 3, 1-3.
59. Juraevna, A. S., Abdumalikovna, Y. D., & Xusanovna, D. N. (2021). MODERN SOCIAL AND PEDAGOGICAL FUNCTIONS OF MUSIC ART AND EDUCATION. Journal of Ethics and Diversity in International Communication, 1(1), 57-59.
60. Тешабаева, О. Н., & Юлдашева, Д. А. (2022). Ўзбекистонда банк хизматлари бозори бошқаруви ва ривожланишининг хусусиятлари. Results of National Scientific Research International Journal, 1(3), 91-97.
61. Sobirov, B., Yuldasheva, D., Iroda, N., & Laylo, T. (2022, February). MUSICAL WORKS AND THEIR PLACE IN HUMAN LIFE. In Archive of Conferences (pp. 53-56).