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PHYSICAL FITNESS CHARACTERISTICS OF SECONDARY SCHOOL STUDENTS

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Abstract

Monitoring and studying the regional characteristics of physical conditions in secondary school students reveal differences in their physical state, mobility levels, and physical indicators. Investigating these differences allows for the scientific justification of standards and the introduction of necessary adjustments to curricula based on regional factors aimed at improving the physical education process.

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Introduction

The attainment of independence by the Republic of Uzbekistan highlighted a pressing issue within the education system: the development and implementation of state programs for physical education. Monitoring and studying the regional characteristics of physical conditions in secondary school students reveal differences in their physical state, mobility levels, and physical indicators. Investigating these differences provides an opportunity to scientifically justify standards and introduce necessary adjustments to curricula based on regional factors, aimed at enhancing the physical education process.

"Health" tests and standardized educational norms for various types of educational institutions in Uzbekistan are widely adopted and utilized. However, further in-depth scientific research is required to refine these standards. The World Health Organization expert committee defines physical performance as the ability to perform muscular work satisfactorily, typically measured by aerobic capacity. This is assessed by the volume of work that can be performed within 15-30 minutes, reflecting the optimal coordination of the circulatory and respiratory systems in delivering oxygen to active tissues.

In experimental research, accurately determining age involves calculating the time between the date of birth and the date of anthropometric measurements. A table developed for practical use can facilitate quicker age calculations for each child. Physical development assessment tables should account for the interrelationship between height, weight, and chest circumference measurements. Statistical grouping of age data also requires meticulous attention.

In the context of secondary school physical education, the primary goal of physical activity is achieved through targeted instruction of motor skills and development of physical qualities. Traditional concepts of physical education focus on preventing health issues among school students and strengthening their physical condition, thereby contributing to their overall development. Research has shown that the content of school physical education curricula is closely linked to the dominant development of natural

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needs, a connection that continues to be vital.

Middle school years (ages 11-14) are characterized by active individualization, with needs and motivations regulated through "self-individualization - self-personalization" relationships. Enhancing physical qualities and improving health remains a crucial objective of school physical education, with a significant focus on developing students' abilities to perform independent physical exercises.

The results of pedagogical research have provided valuable insights into the holistic process of forming physical culture among school students and have established fundamental principles for enriching its content. Detailed recommendations for the "core physical culture" in physical education theory and methodology allow for the regulation, systematization, and expansion of the subject's content, incorporating a health-promoting orientation.

Monitoring health promotion programs and pedagogical methods has identified them as key factors in valeological programs for physical education. The analysis of physical education curricula reveals that current programs do not adequately support health enhancement tasks with physical exercises aimed at preventing various health deviations. The focus should be on shaping a scientifically based worldview related to physical culture among the school contingent and developing a system of knowledge, skills, and competencies necessary for organizing and conducting independent physical education activities. Physical education classes should align with educational goals, contribute to the development of cognitive abilities, integrate with other subjects, and equip students with methods for physical development. The attainment of independence by the Republic of Uzbekistan highlighted one of the urgent issues in the education system: the development and implementation of state programs for physical education. Studying motor abilities and physical performance at regional and local levels, provided that necessary metrological and methodological requirements are considered, can yield significant scientific and practical benefits. The study of motor readiness and physical performance is widespread and always includes regional and local aspects. Despite the simplicity of pedagogical tests, there are various methods for adapting tools, multiple implementation options, and primary data processing techniques that influence recorded results.

In Uzbekistan, "Health" tests and the normative content of educational standards for various types of educational institutions are widely adopted and standardized. However, further detailed scientific research is required to deepen the level of standardization.

Regarding physical performance tests, the World Health Organization expert committee defines physical performance as the ability to perform muscular work satisfactorily. Typically, physical performance is determined by aerobic capacity, which is measured by the volume of work that can be performed within 15-30 minutes, reflecting the optimal coordinated functioning of the circulatory and respiratory systems, and delivering maximum oxygen to active tissues. Currently, several recognized standard physical performance tests are available, with the most commonly used procedures provided by international biological programs. Research has been conducted to identify the impact of various test details on physical performance indicators. Analyses show that their impact is relatively minor. Thus, the values of maximal functional tests are not dependent on specifics such as preliminary warm-ups, constant or incremental loading, and variations of this load. Naturally, the analysis of regional and local data is conducted with consideration of the subjects' age. Ideally, age should be recorded based on a document confirming the date of birth and then expressed as a decimal. This does not account for the various customs of determining age in different countries and cultures.

In experimental research, determining age accurately should be based on calculating the time between the date of birth and the date of anthropometric measurements. A table developed by us is proposed for practical use to facilitate quicker age calculations for each child. The physical development assessment tables are structured to account for the interrelationship between height, weight, and chest circumference measurements. Statistical grouping of age data also requires careful attention.

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In the context of secondary school physical education, the primary goal of physical activity is achieved through targeted instruction of motor skills and the development of physical qualities. Traditional concepts of physical education focus on preventing health issues among school students and strengthening their physical condition, contributing to their development by addressing the true nature of physical qualities in the pedagogical process.

A group of leading scholars has studied the problems related to physical qualities based on methodological and pedagogical ideas (e.g., K.K. Shchedrovitskiy and others). Methodological approaches to the development of the fundamentals of the "Physical Culture" subject aim to shape and improve the physical condition of individuals through targeted instruction of motor activities and the development of physical qualities within the framework of school physical education. Traditionally, the development of motor qualities is viewed from the perspective of preventing and strengthening students' health.

Methodological approaches to developing the fundamentals of the "Physical Education" subject have evolved to focus on the targeted preparation of motor activities and the development of physical qualities in young students. Long-term monitoring of research, including the analysis of methodological and pedagogical ideas, has been summarized in educational-methodological publications, providing substantive insights into the structure and formation of physical qualities based on experimental research results.

The results of pedagogical research on this issue have provided insights into the holistic process of forming physical culture among school students, establishing the fundamental principles for enriching its content. Based on the objective nature of the "Physical Culture" subject, it has become possible to define the essence of enriching the curriculum with social directions to strengthen the health and physical development of young students.

Detailed recommendations on the content of the "core physical culture" in physical education theory and methodology have been provided. This allows for the regulation, systematization, and expansion of the subject's content, giving it a health-promoting orientation within the framework of physical culture development.

Based on methodological ideas, different types of physical culture activities that reflect the objectives of forming school students are distinguished within the content of the physical culture subject in the school education system. Retrospective analysis of state physical education programs has clarified both quantitative (normative content) and qualitative aspects of their content and direction.

The standards for physical readiness requirements for school students, reflecting various developmental stages of specific body parts and structures, serve as a distinct "tool" for teachers in their professional activities. This allows them to manage the physical education process effectively. Overall, the analysis of physical education curricula supports the view that the content of school physical culture is closely related to the dominant development of natural needs, and this will continue to be the case.

During middle school years (ages 11-14), students are characterized by active individualization, with needs and motivations regulated through "self-individualization - self-personalization" relationships. Improving physical qualities and enhancing health remains a crucial task in school physical education, with a noticeable shift in the focus towards developing students' ability to perform independent physical exercises.

Conclusion

The monitoring of health promotion programs and pedagogical methods has identified them as key factors in valeological programs for physical education. Analytical monitoring of physical education curricula within the school education system indicates that the current programs do not adequately support health enhancement tasks with physical exercises aimed at preventing various health deviations.

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The focus is on shaping a scientifically based worldview among the school contingent related to physical culture, and developing a system of knowledge, skills, and competencies necessary for organizing and conducting independent physical education activities. When school physical education teachers are directed towards meeting physical readiness standards, sports training methods are often incorporated into the school physical education process.

Physical education classes should meet educational goals, contribute to the development of students' cognitive abilities, integrate with other subjects, and equip students with methods for physical development. The analysis of physical education program monitoring has shown that the primary focus of school programs is on health preservation, optimal physical development, movement abilities, acceptable levels of knowledge and skills, and the development of motives and skills related to physical education and sports activities.

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