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IMPROVING THE METHODOLOGY FOR ASSESSING THE LEVEL OF PHYSICAL FITNESS OF SCHOOL STUDENTS ACCORDING TO AGE CHARACTERISTICS

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Abstract
This article analyzes modern approaches to assessing the level of physical fitness of general secondary school students with due consideration of their age-related characteristics. Shortcomings of the existing assessment system are identified, and scientifically grounded methodological proposals are put forward. The improved approach highlights opportunities to ensure students' healthy development and to enhance the effectiveness of physical education classes.

Keywords: Physical fitness, age characteristics, assessment methodology, monitoring, general secondary school, testing system.

Introduction

MAKTAB O‘QUVCHILARINING YOSH XUSUSIYATLARIGA KO‘RA JISMONIY TAYYORGARLIK DARAJASINI BAHOLASH METODIKASINI TAKOMILLASHTIRISH

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Annotatsiya:
Mazkur maqolada umumta’lim maktab o‘quvchilarining yosh xususiyatlarini inobatga olgan holda jismoniy tayyorgarlik darajasini baholashning zamonaviy yondashuvlari tahlil qilinadi. Mavjud baholash tizimidagi kamchiliklar ko‘rsatilib, ilmiy asoslangan metodik takliflar ilgari suriladi.Takomillashtirilgan

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yondashuv orqali o‘quvchilarning sog‘lom rivojlanishini ta’minlash, jismoniy tarbiya darslarining samaradorligini oshirish imkoniyatlari yoritilgan.

Kalit so‘zlar: jismoniy tayyorgarlik, yosh xususiyatlari, baholash metodikasi, monitoring, umumta’lim maktabi, test tizimi.

In recent years, physical education of students in general secondary schools has become one of the priority areas of state policy. In fostering a healthy generation, the accurate determination of the level of physical fitness, its regular monitoring, and systematic development are considered crucial factors. However, the existing assessment system often fails to sufficiently take into account students’ age-related and individual physiological characteristics. For this reason, there is a growing need to improve this process on the basis of a scientifically grounded methodology.

Physical fitness is an integral indicator that reflects the level of development of an individual’s basic physical qualities, including strength, speed, endurance, flexibility, agility, and coordination abilities. Physical fitness is not limited solely to the development of motor qualities; it also encompasses the functional capacities of the organism, muscular activity, the performance of the cardiovascular and respiratory systems, as well as the level of psychophysiological preparedness.

The physical development of an individual is formed gradually under the influence of age-related anthropometric, biological, and physiological factors. Therefore, universal standards cannot be applied when assessing physical fitness; instead, criteria specifically developed for each age stage must be used. In this context, not only the child’s chronological age but also biological age, growth rate, sexual maturation, and individual characteristics should be taken into consideration.

According to age periods, the following changes are observed in the development of physical qualities:

Ages 7–10: this is the period during which speed, agility, and coordination abilities develop most intensively. At this age, the motor analyzer develops actively, and children quickly master new movements. Therefore, in assessment, movement speed, jumping ability, and simple coordination tasks serve as the primary measurement indicators.

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Ages 11–14: this is a period of intensive development of strength, general endurance, and speed–strength qualities. At this stage, hormonal changes in the body become more pronounced, leading to an increase in muscle mass and an expansion of heart and lung capacity. In the assessment process, running distances, static and dynamic strength exercises, and tests such as the standing long jump play a significant role.

Ages 15–17: this is the most favorable period for the formation of specialized physical fitness. At this stage, a relative balance of strength, speed, and endurance is established, and the acquisition of complex sports techniques becomes easier. Therefore, assessment involves specialized tests, such as exercises that determine technical and functional capabilities in a specific sport.

The theoretical foundations of assessing physical fitness also include the following components:

a scientifically grounded system of standards,

monitoring mechanisms,

safe assessment methods that do not negatively affect students' health,

and tracking the dynamics of individual development.

An assessment system structured in this manner helps to identify students' real capabilities, monitor positive and negative changes in their physical development, and effectively plan physical education classes.

Problems of the existing assessment system:

The existing system for assessing physical fitness contains a number of systemic and methodological shortcomings that do not provide sufficient accuracy in determining students' real physical capabilities. The main problems include the following:

1. Uniform application of test standards across all age groups.

In many schools, physical fitness assessment criteria are established according to a single standard. As a result, the physiological and biological characteristics of students of different ages are not taken into account. For example, expecting the same results from a 10-year-old child and a 16-year-old student is scientifically incorrect. Such unified standards lead to a lack of objectivity in assessment outcomes.

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2. Assessment based solely on outcome-oriented approaches.

In the current system, students are mainly evaluated according to their "final results." Individual development dynamics, exercise execution techniques, and monthly or quarterly progress are not sufficiently considered. This reduces motivation among students with lower levels of fitness and limits the ability to properly analyze the developmental progress of more capable students.

3. Insufficient consideration of health status and gender differences.

In some educational institutions, students' medical indicators, health limitations, or physiological differences between boys and girls are not adequately taken into account. As a result, some students may be subjected to excessive physical loads or inappropriate tests. This increases the risk of injury and reduces the fairness of assessment.

4. Lack of systematic monitoring.

In many schools, physical fitness monitoring is conducted only once or twice a year. Consequently, changes in students' physical development are not recorded regularly, an individual approach is not formed, and training plans are not developed effectively. The absence of continuous monitoring limits opportunities to identify students' potential and to control their health status.

Overall, these problems in the existing system reduce the effectiveness of the physical education process, hinder in-depth analysis of students' individual development, and decrease the objectivity of assessment.

Table 1. Physical Fitness Tests by Grade Levels

Grade Category	Assessment area	Test types
Grades 1–4	General physical fitness	Flexibility, balance, agility
Grades 5–9	Strength and endurance	Elbow bend, 30m run, jump
Grades 10–11	Special training	1000m run, pull-ups, bench press

3. Proposal for an improved assessment methodology

The improved methodology will be implemented in the following main areas:

1. Introduction of differential tests by age category.
2. Application of a digital monitoring system.
3. Taking into account health status.

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4. Taking into account gender characteristics.
5. Introduction of a motivational assessment system.

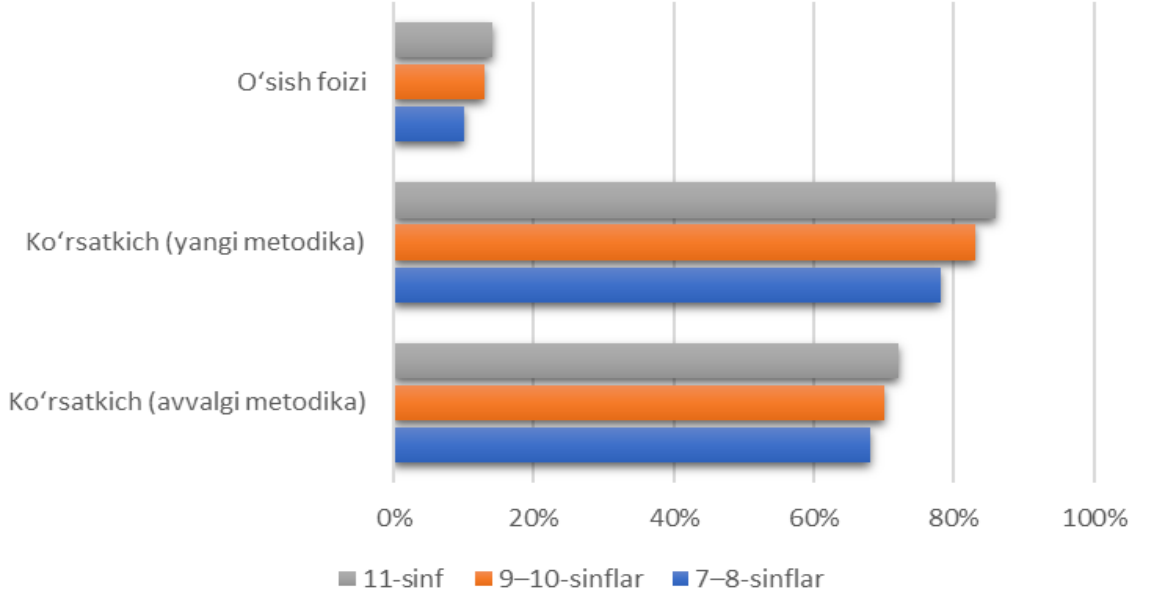

Figure 1. Results of experimental work

The above results confirm the effectiveness of the improved methodology. It was observed that students showed increased interest in physical activity and increased participation in classes.

Conclusion. Improving the system for assessing students' physical fitness should be based on a thorough analysis of their age, gender, and individual characteristics. The improved methodology will contribute to the healthy development of students, improve the quality of physical education classes, and form a healthy lifestyle. Through this, the physical education process at school will become a scientifically based and effective system.

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