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PEDAGOGICAL CONTROL AND ITS SIGNIFICANCE IN CONTROLLING SPEED-POWER MOVEMENTS IN STUDENT WEIGHTLIFTERS

The article reveals the importance of pedagogical control in the management of speed-power movements in student weightlifters. It is assumed that the effectiveness of technical techniques should be evaluated based on the registration of a limited number of basic biomechanical characteristics of movement. Applying a system of internal reference points for an athlete, in combination with hardware techniques, it is possible to develop a control technique acceptable for use at all stages of training athletes for important competitions.

The selection of rational pedagogical influences and their reduction into an algorithmized methodology, the use of a system of urgent information on the effectiveness of exercises will contribute to a targeted change in movement skills, which will speed up the training process of weightlifters and improve the system for evaluating their achievements. When building a specific methodology, the development of the structure and content of algorithmized pedagogical influences acquires great importance. This may indicate an unformed need for physical exercise. Which, in turn, indicates a low level of motivation for physical education. Currently, one of the urgent problems is the effective organization of physical education classes for young people in universities. The main component for the successful implementation of any activity, including physical culture and sports, is motivation. Taking into account psychological factors that contribute to the perception and adequate processing of information, the use of the features of the formation of "meaningful", "target", "operational" attitudes will help speed up the learning process. And the selection of auxiliary exercises, determination of their sequence, will contribute to consolidation of rational motor skills.

Key words: weightlifting, physical exercises, students, physical education.

Соболенко А., Лускань О., Мартинов Ю. Педагогічний контроль та його значення в управлінні рухами швидкісно-силового характеру у студентів-важкоатлетів. В статті розкрито значення педагогічного контролю в управлінні рухами швидкісно-силового характеру у студентів-важкоатлетів. Передбачається, що ефективність виконання технічних прийомів доцільно оцінювати на основі реєстрації обмеженої кількості основних біомеханічних характеристик руху. Застосовуючи систему внутрішніх орієнтирів для спортсмена, у поєднанні з апаратурними методиками, можна розробити методику контролю, прийнятну для використання на всіх етапах підготовки спортсменів до відповідальних змагань.

Відбір раціональних педагогічних впливів та зведення їх у алгоритмізовану методику, використання системи засобів термінової інформації за ефективністю виконання вправ сприятиме цілеспрямованій зміні рухових навичок, що прискорить процес підготовки спортсменів важкоатлетів та покращить систему оцінювання їх досягнень.

Ключові слова: важка атлетика, фізичні вправи, студенти, фізичне виховання.

Formulation of the problem. The process of improving movement technique by athletes of various qualifications is an extremely urgent task of sports pedagogy. Many researchers have shown the effectiveness of some forms of pedagogical instruction during the correction of athletes' activities. From the point of view of cybernetics, pedagogical instruction can be considered as an informational influence characterized by separate indicators (direction, content, volume, frequency and moment of presentation, etc.)

However, in the theory and practice of sports, there is no consensus on the influence of certain characteristics of the teacher's instructions on the peculiarities of information perception and performance of tested motor tasks. The optimal form of the coach's verbal influences when correcting the technique of movements associated with lifting or moving large masses (weightlifting, wrestling, throwing, etc.) has not been determined. The possibilities of using rational forms of instruction, such as unified verbal influences, to control various movements have not been explored.

A complete solution to the question of the optimal characteristics of the teacher's language influences cannot be thought of without an analysis of the entire process of improving sports technique (the formation of "meaningful", "target", "operational" attitudes) and the construction of a methodology that includes a rational selection of complex influences.

Special attention should be paid to the selection of optimality criteria for the performance of technical techniques acceptable for broad sports practice; use of selected criteria at all stages of the training process; minimizing the list of complex recording equipment and time-consuming methods of processing experimental material.

The technique of improving technical skill should be presented in an algorithmized form, which will allow to regulate and take into account the influence of the main pedagogical influences; will contribute to the formalization and transfer of

advanced pedagogical experience.

When building a specific methodology, the development of the structure and content of algorithmized pedagogical influences acquires great importance. Taking into account psychological factors that contribute to the perception and adequate processing of information, the use of the features of the formation of "meaningful", "target", "operational" attitudes will help speed up the learning process. And the selection of auxiliary exercises, determination of their sequence, will contribute to consolidation of rational motor skills.

Analysis of literature sources. This may indicate an unformed need for physical exercise. Which, in turn, indicates a low level of motivation for physical education. Currently, one of the urgent problems is the effective organization of physical education classes for young people in universities. The main component for the successful implementation of any activity, including physical culture and sports, is motivation.

A low level of motivation for physical education, respectively, reduces physical activity, which also leads to a decrease in the level of physical and mental performance, physical fitness and physical development of students. In this regard, it is important to study the structure of the motivational complex for physical education. Search for new means and methods that encourage physical education. The search for methods of increasing motivation for physical education, it is motivation that is an integral component of successful physical culture and sports activity. Preserving and strengthening the health of the student body will prepare competent specialists who are ready for productive and long-term professional activity.

Presentation of the main research material. Physical education of students is part of the educational process. One of the urgent problems of physical education of student youth is reliable pedagogical control over determining the level of physical fitness. Pedagogical control is used to check the level of mastering of the program material, including the assessment of physical fitness. For this purpose, a complex of heterogeneous tests is selected, a testing and evaluation procedure is carried out, based on the results of which the content of physical education programs is corrected.

The main purpose of control in physical education is to identify the adequacy of pedagogically directed influences and their effects to the planned results. If a discrepancy is found, measures should be taken to correct the managerial influences. This makes it possible to consider the process of physical education as a controlled system.

Evaluation in the process of physical education of pupils and student youth is one of the conditions and reasons for attending classes and emphasizes the objectivity of pedagogical control, in particular, the need for comprehensive assessment of success, including activity, theoretical-methodical and motor readiness, and the evaluation criteria of motor activity must be adequate functional capabilities and rely on objective data about physical condition and individual characteristics. The availability of control requirements and standards for determining success contribute to the formation of a positive attitude of students to physical education classes in higher education institutions.

The construction of a program of algorithmic influences aimed at correcting sports equipment should begin with a short introductory lecture that forms a steady interest in the subjects and the need to perform subsequent actions (the formation of a «semantic» setting).

The subjects should be informed about the purpose and procedure for performing all operations according to the algorithmic methodology. For this purpose, a conversation about the main patterns of the formation of motor stereotypes is suitable; showing a model on which explanations are given about the order of inclusion in the dynamic work of the main muscle groups; analysis of the sequence of execution of stages ("frames") of the algorithmized methodology (formation of the "target" installation).

The formation of a rational motor skill should be carried out on the basis of the use of complex influences, including rational pedagogical instruction of a "generalized" orientation with a volume of no more than 2-3 components and leading exercises that contribute to the movement with an equal weight of the projectile with greater speed and power (the formation of an "operational" setting).

Each stage of the work should end with a quality control of the assimilation of the material covered. Control over the effectiveness of the implementation of auxiliary and classical weightlifting exercises must be carried out using a 5-level system of urgent information, including a self-control system for athletes, a visual control system for a coach and methods of instrumental control over the height of the projectile, the speed and power developed by the athlete during the exercise.

American scientists believe that testing is effective only when it is the basis for further comprehensive assessment of student achievement. In this case, it acts as the main factor influencing the learning process as a whole. The search for new forms and methods of pedagogical control over the physical development and physical fitness of students deserves special attention.

Pedagogical control is not only information communication in the management system, but also the development of the management process in a certain direction, which can be ensured only by correcting primary actions [6].

Pedagogical control is, first of all, forecasting the state of the student in the process of performing muscle loads, aimed either at determining the ability to continue the load and the possibility of achieving a given result, or at identifying early signs of overfatigue and overstrain in order to stop the loads in a timely manner.

At the same time, the main attention is paid to the collection and analysis of cardiac information, since aerobic capacity is limited by the performance of the heart [3].

Conclusions. It is assumed that the effectiveness of technical techniques should be evaluated based on the registration of a limited number of basic biomechanical characteristics of movement. Applying a system of internal reference points for an athlete, in combination with hardware techniques, it is possible to develop a control technique acceptable for use at all stages of training athletes for important competitions.

The selection of rational pedagogical influences and their reduction into an algorithmized methodology, the use of a system of urgent information on the effectiveness of exercises will contribute to a targeted change in movement skills, which will

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References

- 1. Kanishevs'kyy S. M. Umovy, stan i perspektyvy rozvytku fizychnoho vykhovannya u vuzakh Ukrayiny / S. Kanishevs'kyy, R. Rayevs'kyy, V. Krasnov, A. Rybkovs'kyy, S. Prysyazhnyuk, N. Tret'yakov // Teoriya i praktyka fizychnoho vykhovannya. 2008. № 1. S. 139–145.
- 2. Krutsevych T. Yu. Spryamovanist' tsinnostey indyvidual'noyi fizychnoyi kul'tury studentiv riznykh viddilen' vuzu / T. Krutsevych, O. Marchenko // Sportyvnyy visnyk Prydniprov"ya. 2008. № 3–4. S. 103–107.
- 3. Lynets' M. Osnovy metodyky rozvytku rukhovykh yakostey : navch. posib. dlya fizkul'turnykh vuziv / M. Lynets'. L'viv : Shtabor, 1997. 204 s.
- 4. Lavrenyuk V. S. Udoskonalen-nya power health of students in the initial process of physical education / Lavrenyuk V. S. // Pedagogy, psycho-logic and medical-biological problems of physical education and sports: zb. sciences. pr. Kharkiv: HDADM, 2011. No6. P.74-76.
 - 5. Matveev L. P. Teoryya y metodyka fyzycheskoy kul'turы / L. Matveev. M. : Fyzkul'tura y sport, 2008. 544 s.
- 6. Prykhod'ko V. V. Reformuvannya vyshchykh navchal'nykh zakladiv fizychnoyi kul'tury i sportu v Ukrayini / V. Prykhod'ko // Teoriya i praktyka fizychnoho vykhovannya. 2008. №1. S. 74–85.
- 7. Ogar G. O. Injection of the program of strength training with the added value of the growth of directness to the physical development and preparation of the children of 15-17 years / G. O. Ogar, V. A. San-zharov, V. I. Lasitsya, E. G. Ogar // Theory and technique of physical education. 2011 .-- No.10. P.37-42.
- 8. Shyyan B. Teoriya i metodyka fizychnoho vykhovannya shkolyariv / B. Shyyan. Ch. 1. Ternopil' : Navch. kn.– Bohdan, 2003. 272 s.

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РОЗВИТОК ФІЗИЧНИХ ЯКОСТЕЙ ВОЛЕЙБОЛІСТІВ

У роботі розглянуто, що сучасний волейбол характеризується високою руховою активністю волейболістів. Ефективне виконання стрибкових та ігрових дій, технічних прийомів, більшості тактичних комбінацій протягом однієї гри або кількох ігрових днів засноване на високому рівні розвитку фізичних якостей. Гра у волейбол вимагає від спортсменів максимального прояву фізичних можливостей, вольових зусиль і вміння користуватися набутими навичками. Здійснено аналіз фізичних якостей волейболістів. Встановлено, що фізична підготовка є одним із найважливіших складових частин тренування спортсменів, що спеціалізуються у волейболі. Вона спрямована на розвиток таких рухових якостей, а саме: сили, швидкості, витривалості, гнучкості і координаційних здібностей. Зазвичай фізична підготовка у волейболі поділяється на загальну та спеціальну.

Ключевые слова: волейбол, фізична підготовка, фізичні якості, тренування, розвиток.

Beigul I., Shishkina O., Gatsura V. Development of physical qualities of volleyball players. The paper considers that playing volleyball requires maximum manifestation of physical capabilities, willpower and the ability to use acquired skills from athletes. Physical training is one of the most important components of the training of athletes specializing in volleyball. It is aimed at the development of such motor qualities, namely: strength, speed, endurance, flexibility and coordination abilities. Physical training in volleyball is usually divided into general and special. General physical training is aimed at the harmonious development of motor skills in volleyball, which indirectly contribute to achieving high results in this game sport. The special physical training of athletes specializing in volleyball is aimed at the development of movement qualities, strictly in accordance with the requirements set by the specifics of the sport, the specifics of the intended activity and the duration of the competition. In volleyball, physical qualities are conditionally divided into general and special. General – strength, speed, endurance, dexterity, flexibility, which largely determine the comprehensiveness of physical development and health of athletes. On the highly developed base of the physical qualities listed above, special physical qualities are developed, which are necessary for playing volleyball: "explosive" strength, speed of movement and jumping, speed, jumping and game endurance, acrobatic and jumping dexterity. The main tasks of physical training are to constantly increase the functional capabilities of the volleyball players' bodies, which determine the level of development of their physical qualities and gradually bring them to intensive loads that ensure the growth of special work capacity and the achievement of optimal sports results.

Keywords: volleyball, physical training, physical qualities, training, development.