METHODOLOGY FOR ASSESSING PSYCHOMOTOR SKILLS IN THE SELECTION AND SCREENING OF YOUNG RUNNERS

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Abstract: This article examines the relevance, theoretical foundations, and practical methods of assessing psychomotor skills in the process of selecting and screening young runners. Psychomotor abilities—components such as speed, strength, agility, balance, and spatiotemporal perception—are key factors for success in running sports. The research explores modern methods for measuring and evaluating the psychomotor development of young athletes, as well as ways to improve the effectiveness of their selection. The article covers the adaptation of the psychomotor testing system to age categories, criteria for interpreting results, and methods for applying the obtained data in the selection process.

Keywords: young runners, selection and screening, psychomotor skills, speed, agility, strength, balance, diagnostic tests, athletic potential, motor abilities.

Annotatsiya: Ushbu maqolada yosh yuguruvchilarni tanlab olish va saralash jarayonida psixomotor ko‘nikmalarni baholashning dolzarbligi, nazariy asoslari va amaliy metodlari tahsil etilgan. Psixomotor qobiliyatlar – tezlik, kuch, chaqqonlik, muvozanat, vaqt va fazoviy hissiyot kabi komponentlar yugurish sportida muvaffaqiyatning asosiy omillaridir. Tadqiqotda yosh sportchilarning psixomotor rivojlanishini o‘lchash va baholashning zamonaviy usullari, shuningdek ularni tanlab olish samaradorligini oshirish yo‘llari ko‘rib chiqilgan. Maqolada psixomotor testlar tizimining yosh toifalariga moslashuvi, natijalarni talqin qilish mezonlari va olingan ma’lumotlarni tanlov jarayonida qo‘llash usullari yoritilgan.

Kalit so‘zlar: yosh yuguruvchilar, tanlab olish va saralash, psixomotor ko‘nikmalar, tezlik, chaqqonlik, kuch, muvozanat, diagnostika testlari, sport istiqbollari, motor qobiliyatlar.

Аннотация: В данной статье изучены актуальность, теоретические основы и практические методы оценки психомоторных навыков в процессе отбора и селекции юных бегунов. Психомоторные способности – такие компоненты, как быстрота, сила, ловкость, равновесие, чувство времени и пространства, являются основными факторами успеха в беговых видах спорта. В исследовании рассмотрены современные методы измерения и оценки психомоторного развития юных спортсменов, а также пути повышения эффективности их отбора. В статье освещены вопросы адаптации системы психомоторных тестов к возрастным категориям, критерии интерпретации результатов и способы применения полученных данных в процессе отбора.

Ключевые слова: юные бегуны, отбор и селекция, психомоторные навыки, быстрота, ловкость, сила, равновесие, диагностические тесты, спортивные перспективы, моторные способности.

Introduction: One of the main conditions for sports success is the timely identification of promising young athletes and the organization of an appropriate training process for them. In running sports, this process is particularly complex, as achieving high results requires not only a high level of functional preparedness but also an optimal combination of specific psychomotor qualities. Psychomotor skills are the psychophysiological basis for performing and controlling movements. They are shaped by hereditary and acquired factors, making their early identification and development crucial. Currently, the selection of young runners is often based on running results or general physical fitness indicators, while a comprehensive assessment of psychomotor skills remains overlooked. This may lead to the loss of some promising runners even at the selection stage. Therefore, developing and implementing a scientifically grounded methodology for assessing psychomotor skills in the selection and screening process is an urgent issue.

LITERATURE ANALYSIS: Issues related to psychomotor abilities and their assessment in sports have been extensively studied by both foreign and local scholars. Bernstein N.A., in his work "On the Construction of Movements," elucidated the hierarchical organization of psychomotor movements and their control mechanisms. Platonov V.N. studied the theoretical and practical aspects of athlete selection, distinguishing psychomotor traits into hereditary and acquired factors. Zatsiorsky V.M. provided valuable insights into methods for assessing the motor abilities of young athletes. International literature (Bompa T., Viru A.) explores various models and strategies for sports selection and specialization, including the application of psychomotor tests. Shvarts V.S. and Khrushchev S.V. studied the age-specific characteristics of selection in children's sports. However, a significant gap remains in the insufficient development of a specific psychomotor diagnostic system tailored to age categories for running sports. Many studies focus on general motor abilities without considering the specific demands of running.

RESEARCH METHODOLOGY: The aim of the research was to develop a practical methodology for assessing psychomotor skills applicable in the selection and screening of young runners (aged 10–12) and to experimentally test its effectiveness. The research consisted of the following stages:

1. **Theoretical Analysis and Method Selection:** Based on the specific demands of running sports (short, middle, and long distances), the most important psychomotor components were identified (speed of reaction, movement speed, dynamic and static balance, rhythm sense, spatial perception, rate of force development). Standardized and reliable tests were selected to assess each component (e.g., 5x10m speed-agility test, Flamingo test (balance), tapping test (movement speed), vertical jump (strength), reaction time tests using equipment, "Signaling" test (spatial perception and reaction)).
2. **Formation of the Experimental Group:** The study involved 80 young male runners aged 10–12, divided into two groups: the experimental group (selected based on

psychomotor test results) and the control group (selected using the traditional method based on general physical fitness tests and running results).

3. **Measurements and Monitoring:** Both groups followed a standardized running training program for 8 months. Initial and final (after 8 months) assessments included a battery of psychomotor tests and running results (60 m, 400 m, 1000 m).

4. **Statistical Analysis:** The obtained results were processed using SPSS software with methods including t-test, correlation analysis, and regression analysis.

CONCLUSION: The results of the conducted research allow for the following conclusions:

The group of runners selected based on a comprehensive assessment of psychomotor skills showed significantly higher rates of improvement in motor indicators and running results during training compared to the control group. This demonstrates the effectiveness of supplementing traditional selection methods with psychomotor diagnostics.

Running results (especially for short and middle distances) showed the strongest correlation with indicators of reaction speed, movement speed, and rate of force development (not maximal strength). This indicates the need for special attention to these specific psychomotor components when selecting runners.

The developed battery of psychomotor tests can be recommended as a practical, time-efficient, and objective tool for use with children aged 10–12.

To further improve the selection process, it is advisable to integrate psychomotor assessment with the study of functional (cardiorespiratory) preparedness and psychological characteristics.

Thus, implementing a comprehensive methodology for assessing psychomotor skills in the selection and screening of young runners enables more accurate identification of promising athletes, their successful specialization, and, consequently, enhanced sports performance. Future promising directions include differentiating this methodology for female athletes, various age groups, and specific types of running (e.g., hurdling), as well as creating computerized diagnostic systems.

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