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DEVELOPMENT OF AN INTEGRATED 'OBSTACLE COURSE' SYSTEM FOR THE DEVELOPMENT OF PHYSICAL AND PSYCHOPHYSIOLOGICAL PREPAREDNESS OF IN-SERVICE TRAINING PARTICIPANTS OF THE MINISTRY OF INTERNAL AFFAIRS OF THE REPUBLIC OF UZBEKISTAN

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ABOUT ARTICLE

Key words: Professional Development Institute of the Ministry of Internal Affairs, trainees, physical preparedness, psychophysiological preparedness, professionally applied training, reaction speed, attention stability, stress tolerance, rapid decision-making.

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Abstract: This article substantiates that the professional duties of internal affairs officers require physical and psychophysiological preparedness to be demonstrated simultaneously and in close interrelation. To implement this theoretical conclusion in practice, an obstacle course was developed within the framework of the study as the central technological component of the integrated model. The obstacle course was designed as a 110-metre practical training complex consisting of ten interconnected sequential stages. It includes a running section, a slalom course involving movement between cones, coordination ladder drills, obstacles and wall elements of varying heights, a jumping trench, stairs, a crawling section, a rescue exercise, and a final disarming stage.

Introduction. The increasing complexity of the global socio-legal environment, the emergence of new forms of crime, and the growing number of extreme service situations require employees of internal affairs bodies to possess not only a high level of physical fitness but also a stable psychophysiological state. Modern professional activities place high demands not only on the musculoskeletal system of employees of the Ministry of Internal Affairs but also

on their neuropsychological stability. Therefore, there is an increasing need to develop physical and psychophysiological preparedness not separately, but as an integrated and interrelated system.

International practice demonstrates that in traditional professional development programs, physical training sessions are primarily aimed at developing physical qualities such as strength, endurance, and agility, while they are often organized without an integrated connection to psychophysiological indicators such as the speed of decision-making in extreme situations, emotional stability, divided attention, and stress resistance. As a result, a problem arises whereby employees who are physically well-prepared may nevertheless demonstrate insufficient effectiveness in real-life service situations, including unexpected attacks, performing duties under pressure, and coordinated actions within a group.

This situation highlights the need to develop scientific and methodological foundations for improving physical and psychophysiological preparedness based on a comprehensive and integrated model. In the Republic of Uzbekistan, particular importance is attached to continuously improving the physical preparedness of military personnel, developing strong moral and psychological resilience and willpower, as well as fostering the ability to overcome various physical and psychological difficulties. Such preparation is essential for ensuring that military personnel are capable of effectively performing their duties in combat situations, including resisting and engaging in individual combat with a potential adversary.

The purpose of the research: To develop proposals and recommendations for integrated training sessions and an “Obstacle Course” aimed at the comprehensive development of the physical and psychophysiological preparedness of trainees undergoing professional development at the Ministry of Internal Affairs.

Research objectives:

To develop an obstacle course, taking into account international standards, aimed at improving the physical and psychophysiological preparedness of trainees undergoing professional development.

To develop a ten-stage obstacle course with a total length of 110 meters, closely integrated with the existing training program topics, including wrestling techniques, striking and defensive techniques, and disarming techniques, in order to assess the physical and psychophysiological preparedness of trainees under conditions approximating real-life operational situations. The developed obstacle course provides an opportunity to strengthen combat and practical skills under conditions of physical fatigue and emotional stress.

The object of the research: The object of the research was the physical training process of trainees undergoing professional development at the Ministry of Internal Affairs.

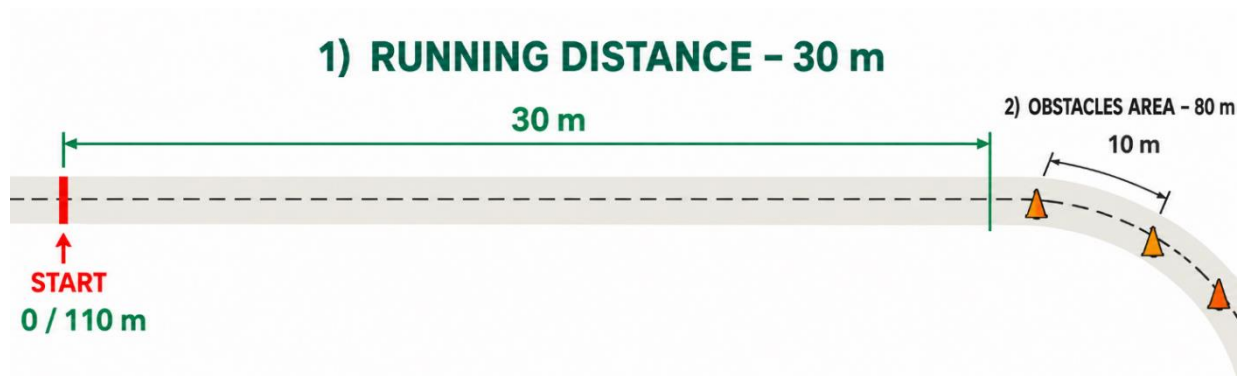
The subject of the research: The subject of the research comprises the structure and content of physical training sessions for trainees undergoing professional development at the Ministry of Internal Affairs.

Research methods. The study employed the following methods: analysis of scientific and methodological literature, analysis of relevant regulatory and legal documents, pedagogical observation, pedagogical testing, pedagogical research, and mathematical and statistical methods.

The scientific novelty of the research is as follows:

A ten-stage obstacle course with a total length of 110 meters was developed to assess the physical and psychophysiological preparedness of trainees under conditions approximating real-life operational situations. The obstacle course is closely integrated with the existing training program topics, including wrestling techniques, striking and defensive techniques, and disarming techniques. This approach provides an opportunity to reinforce combat and practical skills under conditions of physical fatigue and emotional stress.

Methods. The main scientific and methodological feature of the developed obstacle course is that it was designed not as an independent activity outside the topics of the “Physical Training” module of the Ministry of Internal Affairs training program, but specifically to reinforce these topics in a practical, comprehensive, and situation-oriented format. In particular, the obstacle course incorporates wrestling techniques, striking and defense techniques, as well as unarmed disarming techniques against edged and firearms. Therefore, the stages of the obstacle course were not selected randomly; rather, each stage was designed to directly correspond to a specific topic within the training program. Another important methodological feature of the obstacle course is that trainees are not provided with sufficient time for complete recovery between stages. This reflects the reality that, in actual operational situations, an officer may not have the opportunity to “rest” at a time convenient for them. Immediately after completing the final stage of the obstacle course, which is characterized by the highest level of stress, the trainee’s psychophysiological indicators, particularly reaction speed and attention, are measured. This provides the primary empirical data for calculating integrated assessment criteria such as the Stability Coefficient and the Final Competency Index, which are considered in detail below.



Stage 1. Running Distance (0–30 m) The first stage of the obstacle course is a straight-line section with a total distance of 30 meters. No additional obstacles or equipment are placed in this section. The trainee moves in a straight direction at maximum speed.

Procedure: The trainee starts moving from the “START” line upon a signal and covers the 30-meter distance in sprint mode at maximum speed.

What it develops and why it is necessary: The primary purpose of this stage is to mobilize the trainee’s initial physical resources and ensure that they enter the subsequent, technically more complex stages in a physically warmed-up state.

ZIGZAG RUN CONES (30–40 m)

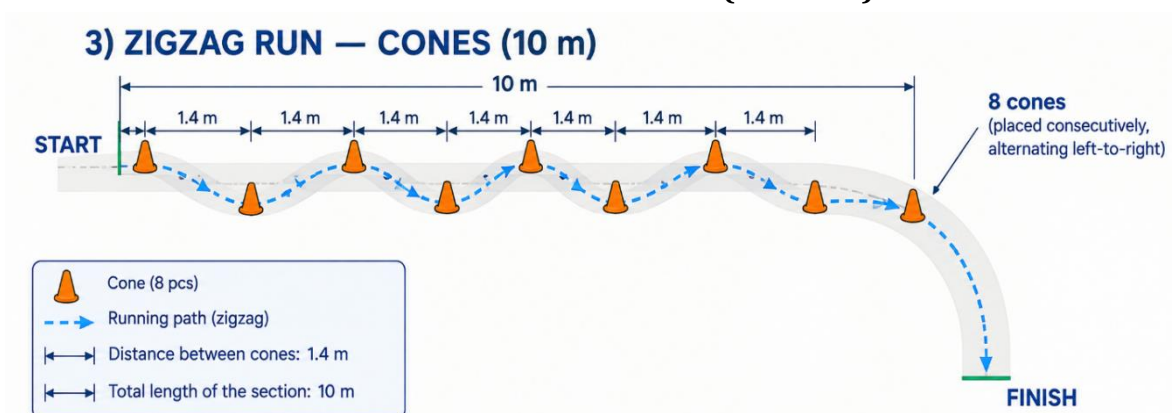


Figure 2. Zigzag Path. Eight cones are placed consecutively over a 10-meter distance in an alternating left-to-right arrangement. The distance between the cones is approximately 1.4 meters. **Procedure:** The trainee must run rapidly between the cones in a “zigzag” pattern without hitting or knocking over any of them. Rapid changes of direction are required around each cone. **What it develops and why it is necessary:** This stage primarily assesses agility and coordination abilities, particularly the ability to change the body’s direction of movement quickly and accurately. This skill is directly useful in operational activities, such as pursuing offenders and maneuvering rapidly between obstacles. In addition, this stage assesses the ability to maintain focused attention, particularly the rapid perception of the position of each

subsequent cone Eight cones are placed consecutively over a distance of 10 meters in an alternating left-to-right arrangement. The distance between the cones is approximately 1.4 meters.

Procedure: The trainee must run rapidly between the cones in a “zigzag” pattern without hitting, knocking over, or bypassing any of them. Rapid changes in direction are required around each cone. What it develops and why it is necessary: This stage primarily assesses agility and coordination abilities, namely the ability of the body to change direction quickly and accurately. In operational activities, this skill is directly useful for pursuing offenders and maneuvering rapidly between obstacles. In addition, this stage assesses the ability to maintain focused attention, particularly the rapid perception of the position of each subsequent cone

DISARMING (100–110 m)

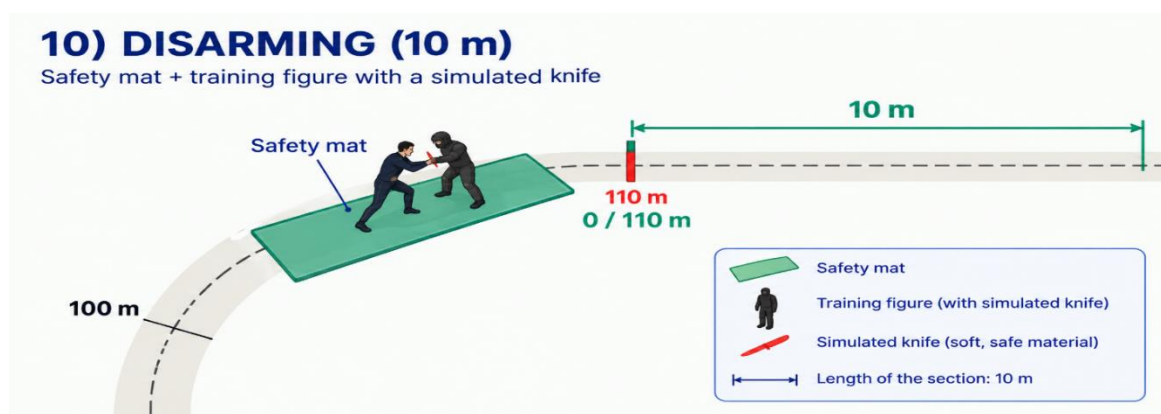


Figure 3. Disarming an Armed Offender. This is the final 10-meter section of the obstacle course. A soft safety mat is placed on the ground, and a figure (a colleague or mannequin) armed with a simulated “knife” (a specially designed training weapon made of soft, safe material) is positioned on the mat. Procedure: Having reached this final stage in a fatigued state after completing the previous nine stages, the trainee must apply the appropriate defensive and disarming techniques against the “armed person,” based on the methods taught in Topic 3.4 of the dissertation training program. What it develops and why it is necessary: This is the most important, final, and integral stage of the entire obstacle course. It assesses how effectively and technically correctly the trainee can act in a high-risk situation (an armed threat) against the background of the physical resources expended during the previous nine stages, under conditions of maximum fatigue. The results of this stage including completion time, technical accuracy, and the psychophysiological test conducted immediately afterward provide valuable data for calculating the key indicators of the integrated model: the Final Competency Index

(FCI) and the Stability Coefficient (SC). The soft safety mat ensures that this high-risk exercise can be performed safely while minimizing the risk of injury.

JUMP PIT – 2 METERS (65–75 M)

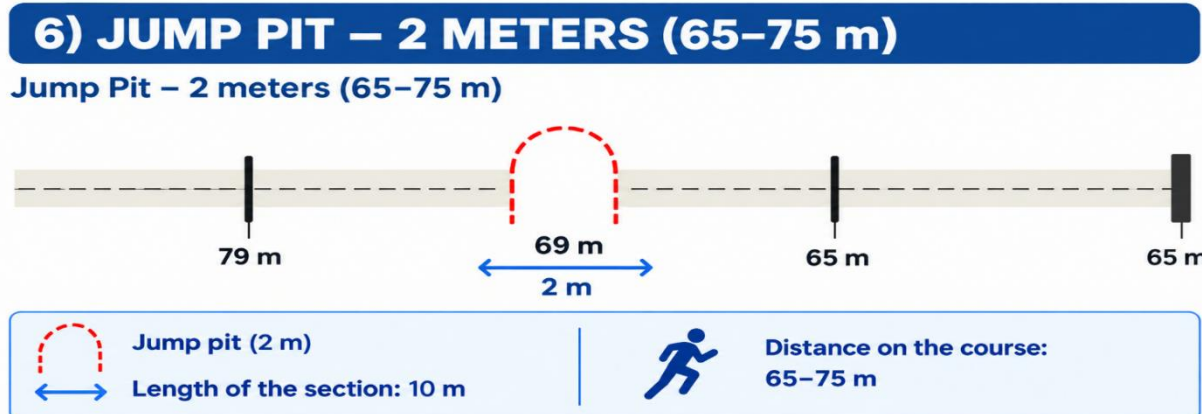
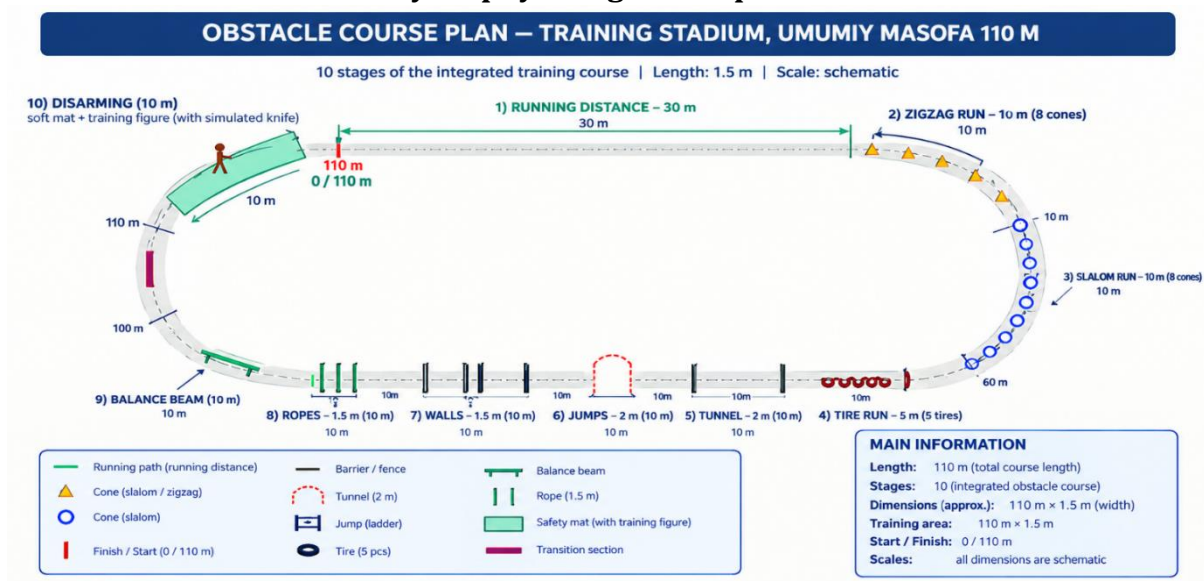


Figure 4 Jump Pit. Within a 10-meter section, a 2-meter-wide “pit” (gap) is modeled, which may represent a trench, ditch, or gap between two buildings under real-life conditions. Procedure: The trainee runs toward the obstacle and must jump across the 2-meter gap. Accurate assessment of the distance and proper distribution of jumping force are of critical importance. What it develops and why it is necessary: This stage assesses the ability to rapidly estimate distance visually (visual-motor assessment) and perform the standing/long jump technique. Misjudging the distance or failing to generate sufficient force may result in a fall or injury. Therefore, this stage also tests attention and decision-making speed, including the ability to make a rapid decision on whether to jump or seek an alternative route

“OBSTACLE COURSE”

Figure 4 The “Obstacle Course” for the Integrated Development of Physical and Psychophysiological Preparedness.



Conclusion. The results of the conducted research made it possible to formulate the following conclusions regarding the comprehensive development of the physical and psychophysiological preparedness of trainees undergoing professional development at the Ministry of Internal Affairs:

It is recommended that the complex of 50 exercises developed for the ten stages of the obstacle course be introduced on a pilot basis into the schedules of sports activities and physical training sessions at the retraining centers of the Ministry of Internal Affairs. Initially, it is advisable to test the complex as a pilot project at one center and, after obtaining positive results, gradually implement it across all regional centers.

As a practical means of implementing the integrated model, a 10-stage obstacle course and a targeted training complex consisting of a total of 50 exercises developed for each stage were established. The exercises were structured according to the “from simple to complex” principle and were gradually incorporated into the training program of the trainees in the experimental group.

References:

1. Акулова Ю.О. Влияние профилирующих упражнений на уровень специальной физической подготовленности гимнастов / Ю.О. Акулова, В.С. Шерин // Сб. статей Олимпийская идея сегодня: материалы Шестой Всероссийской научной конференции с международным участием. М. 2016. С. 3-8.
2. Булгакова Н.Ж. Нормирование тренировочных нагрузок с использованием показателей пульсовой энергетической стоимости упражнения // Теория и практика физической культуры. М.: 2009. –С. 23-28.
3. Донской Д.Д. Двигательная задача в спортивных действиях / Д.Д.Донской, С.В.Дмитриев // Теория и практика физической культуры. М.:1994. –С. 40-43.
4. Барабанкина, Э.Ю. Интеграция двигательных заданий двигательных заданий и регламентированных режимов дыхания в тренировке квалифицированных легкоатлетов / Е.Ю. Барабанкина, М.С.Шубин, В.В. Чемов // Физическая культура и спорт – наука и практика. М.:– 2015.– С.3-8.
5. Умаров М.Н. Распределение информативных признаков в отдельных видах гимнастического многоборья // «Фан спорта». Чирчик2021. №4. -С. 9-12.
6. Умаров М.Н., Умаров Д.Х. Характеристика средств восстановления и стимуляции работоспособности // «Фан-спорта». -Т., 2005. -С. 44-51.

7. Умаров М.Н., Эштаев С.А. Технология определения наиболее значимых показателей тренировочной нагрузки гимнастов на соревновательном этапе подготовки // «Фан спорта». –Т., 2011. №2. –С. 43- 47.

8. Тимаков Т.С. Факторы спортивного отбора или кто становится олимпийским чемпионом, Монография. М.: -Спорт. 2018. -С. 44-51.

9. Солонкин А.А. Технология применения круговой тренировки на учебных занятиях для развития специальных двигательных способностей у студентов различных специализаций колледжа физической культуры / А.А. Солонкин. Учебное пособие. Смоленск: СГИФК, 2002. -С. 155-157.

10. Платонов В.Н., Запоржанов В.А. Теоритические аспекты отбора в современном спорте. Отбор, контроль и прогнозирование в спортивной тренировке. Учебное пособие. Киев, 2009. –С. 5-16.