

Combat sports elements to intensify physical training of police cadets

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Abstract

Objective of the study was to rate and analyze benefits of modern combat sports elements for physical training service at police academies.

Methods and structure of the study. The study was run at Belgorod Law Institute of the Ministry of Internal Affairs of Russia named after I.D. Putilin in the academic year of 2019-20. The cadet sample was split up into two groups, and their physical fitness was tested in the experiment by the standard pre- versus post- experimental physical fitness tests recommended by the valid academic physical training curriculum. The group physical training service included the following three modules: (1) physical training theory; (2) Combat sports elements; and (3) Standard physical trainings.

Module 3 in both groups included the same speed, coordination and strength (Sp, Co, St) training exercises; general/ special endurance and flexibility training practices and a combined obstacle course.

Module 2 included a range of sambo, judo, boxing and hand-to-hand fighting elements excelled in the controlled sparring bouts. The Group 1 physical training service was intensified by the controlled sparring bouts sessions once a week. And the Group 2 physical training service gave a special priority to combat sports skills excellence trainings with controlled sparring bouts once a month. The group physical fitness was tested by the standard 100m sprint, 10x10m shuttle sprint, 1km cross-country race, pull-ups and prone push-ups, plus a combined strength test.

Results and conclusion. The academic physical training service intensified by the combat sports elements with controlled sparring bouts on a weekly basis was found to secure significant ($p < 0.05$) progress in every strength test; and therefore, this physical training model may be recommended for application in the academic physical training curriculum.

Keywords: intensification, physical training, combat sports elements, cadets.

Background. Modern combat sports elements including judo, sambo, boxing and hand-to-hand fights are ranked among the key physical training service components by the national police academies under the Ministry of Internal Affairs [5]. We assumed that the modern combat sports elements and tools complementary to the standard physical training service may be highly beneficial for special physical fitness of police cadets.

Objective of the study was to rate and analyze benefits of modern combat sports elements for physical training service at police academies.

Methods and structure of the study. The study was run at Belgorod Law Institute of the Ministry of Internal Affairs of Russia named after I.D. Putilin in the academic year of 2019-20. The cadet sample was split up into two groups, and the physical fitness was tested in the experiment by the standard pre-

versus post- experimental physical fitness tests recommended by the valid academic physical training curriculum. The group physical training service included the following three modules: (1) physical training theory; (2) Combat sports elements; and (3) Standard physical trainings.

Module 3 in the both groups included the same speed, coordination and strength (Sp, Co, St) training exercises; general/ special endurance and flexibility training practices and a combined obstacle course [1].

Module 2 included a range of sambo, judo, boxing and hand-to-hand fighting elements excelled in the controlled sparring bouts [2, 3]. The Group 1 physical training service was intensified by the controlled sparring bouts sessions *once a week*. And the Group 2 physical training service gave a special priority to combat sports skills excellence trainings with controlled sparring bouts *once a month*. The group physical fitness was tested by the standard 100m sprint, 10x10m shuttle sprint, 1km cross-country race, pull-ups and prone push-ups, plus a combined strength test.

Results and discussion. The group physical fitness progress was tested by the pre- versus post-experimental tests. Group progress in the *speed qualities* was tested by the 100m sprint test that rated the pre-experimental speed 'low' (satisfactory) in both groups; versus the post-experimental tests that found insignificant ($p > 0.05$) progress in both groups to the 'average' (good) level. The 10x10m shuttle sprint test ranked the pre-experimental speed 'low' in both groups; versus the post-experimental tests that found insignificant ($p > 0.05$) progress in both groups.

The group *endurance* was tested by the 1km race test that rated the pre-experimental endurance 'low' (satisfactory) in both groups; versus the post-experimental tests that found significant ($p < 0.05$) progress in both groups to 'excellent' levels.

The group *strength* was tested by the pull-ups, prone push-ups and combined strength tests. The pre-experimental strength tests rated 'low' both groups; versus the post-experimental tests that found significant ($p < 0.05$) progress in Group 1 to 'excellent' level, whilst Group 2 showed insignificant ($p > 0.05$) progress in these tests. The combined strength tests found progress in both groups, albeit only Group 1 made significant ($p < 0.05$) progress to 'excellent' level – versus noticeable although insignificant ($p > 0.05$) progress in Group 2

Conclusion. The academic physical training service intensified by the combat sports elements with controlled sparring bouts on a weekly basis was found to secure significant ($p < 0.05$) progress in every strength test; and therefore, this physical training model may be recommended for application in the academic physical training curriculum.

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