

PHYSICAL TRAINING OF COLLEGE STUDENTS USING KARATE ELEMENTS

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One of the promising areas that can improve the level of physical fitness of students is the use of elements of Eastern martial arts, in particular, karate. The discipline of karate is characterised by an integrated approach to the development of physical, volitional and spiritual qualities, which makes it an effective tool of physical education. Inclusion of karate elements in the educational process of physical training can not only increase the level of physical fitness of students, but also develop their discipline, self-confidence and responsibility, which is valuable for personal development.

Material and methods. Analysis of literary sources, pedagogical experiment, methods of mathematical statistics, survey, conversation, interview.

Results and their discussion. Tiago et al. studied the effects of karate on adolescent physical fitness and concluded that regular karate practice by adolescents can increase muscular endurance, promote cardiopulmonary function, and promote adolescent physical and mental health [1].

Some researchers have concluded that karate technique can increase hypoxia tolerance, improve practitioners' anaerobic capacity and contribute to improved cardiopulmonary function. Karate practice can improve self-confidence [2].

Wen Jianing conducted a self-control test with students who had experience in karate training and those who had not participated in relevant training, and finally found that students who had experience in karate training had a good level of self-control in terms of both cognition and action. Karate training can improve self-control ability. Can cultivate the practitioners' spirit of hard work and perseverance [3].

Chengfeng Liu concluded that karate influences the development of executive function. Executive ability is an integral part of our life. Improving executive ability can greatly improve the quality of our life [4].

To find out whether karate practice affects students' self-control ability, Wen Jianing et al. tested students' cognitive self-control and corresponding brain waves using a Go/Nogo task, and tested individuals' behavioural self-control using a sitting posture at a right angle against a wall, comparing self-control and self-control over four weeks. The study found that in all homework tasks, the karate group performed significantly better than students who did not increase exercise, while there was no significant difference in running exercise in the two groups. Thus, karate exercise can consistently and effectively improve an individual's cognitive and behavioural self-control, possibly because practice reduces the vulnerability of self-control [5].

Conclusion. Adding karate training to the physical education classes of ordinary college students can enrich the content of the class, increase the choice of teachers in the class, attract college students, long durable running is relatively boring, karate training effectively reduces the boredom in the process of sports training. For college students who are «afraid to run», the choice of karate training is suitable to replace the ordinary physical education training, and the results of physical tests will not be affected, especially in terms of strength and speed.

Performance by degree is even better. For college students with a large number of courses, heavy academic tasks, little exercise time after class and scattered exercise time, the karate training mode has a heavy workload, short time, low site requirements, small space needed both indoors and outdoors, which can better solve the problems of

such college students. There are many forms of karate training. Different forms of training can improve the muscle strength of different parts of the body. The types of movements used in this article effectively improve the muscles of the legs and buttocks. To comprehensively improve the physical fitness of all parts of college students, various forms of karate training can be used. The major muscle groups of the entire body are widely distributed, including 5 major muscle groups and 46 muscles. Colleges and universities should strengthen the introduction of teachers or provide training in school. Theoretical knowledge can be more in-depth to be more creative. Involve students in class content, teaching form and scientific training, guide students, turn students from passive to active, develop students' enthusiasm to participate in sports training and develop lifelong sports consciousness.

1. Carneiro De Castro, Tiago. Effect of karate training on anthropometric indices and physical fitness of male adolescents in Northeast Brazil / Tiago Carneiro De Castro // *Gazzetta Medica Italiana Archivio per le Scienze Medica*. – 2012. – № 171 (3). – P. 1–5.
2. Galimsky, V. Influence of karate techniques on the functional state and physical fitness of students of the Flight Academy / V. Galimsky. – Moscow : Nauka, 2015. – 54 p.
3. Wen, Jianing. Research on the benefits of self-control of karate coaches / Q. Wen, Y. Zhang, Q. Li // *Journal*. – 2022. – № 37 (02). – P. 226–232.
4. Liu, Chengfeng. The effect of karate classes on the executive functions of preschool children aged 5-6 years / Ch. Liu // Jinan: Shandong Institute of Physical Education. – 2020. – P. 240.
5. Wen, Jianing. Effect of karate training on students' self-control ability: behavioural and EEG data / Q. Wen, Q. Li, Q. Yang, Y. Zhang // Jinan: Shandong Institute of Physical Education. – 2020. – Vol. 26 (03). – P. 240–249.