

Research on Physical Training Methods of Police College Students Based on Motor Functional Perspective

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ABSTRACT. *The increasingly severe social situation requires students of police academies to have good physical fitness to stop crime. From the perspective of kinematics, this article applies research methods such as literature data method, expert interview method, hierarchical screening method, and logic analysis method to comprehensively research and judge the current status of research in the field of kinematics function at home and abroad and the current state of physical training of students in police colleges. , Provides a series of physical training methods such as running training method, swimming training method, police body repetitive training method, simple equipment training method, ball game training method, etc., which are designed to meet the physical fitness needs of public security practice as a whole, for the police Comprehensive training of college students provides useful lessons.*

KEYWORDS: *Motor Functional Science, Sports Training; Police Academy, Physical Training; Physical Fitness*

1.Introduction

Graduates from police academies are the main supplementary force and source of the police force in China. Police law enforcement combat skills are mainly improved through police physical education and physical training in public security colleges[1]. The strength of the students' physical fitness in police academies is an important guarantee for the physical and mental health and combat effectiveness of subsequent police officers. The physical training of the students in police academies directly determines the overall quality and image of the police force, and also directly affects the strength of the law enforcement fighting ability of the public security team and the long-term security of the society.

Physical training for students in police academies is a physical training activity based on the professional characteristics of the police and the actual needs of the

police themselves. It is based on scientific physical exercises to enhance the physical fitness of the police, improve their athletic ability, Responsiveness, an organized and meaningful special sports activity for the purpose of promoting the overall physical and mental development of the police, and strengthening the construction of the police force, is a basic training to enhance the police's physical fitness[2]. The level of physical fitness development of students in police academies has a direct restrictive effect on the combat effectiveness of public security and is also an important material basis for the factors that constitute public security combat effectiveness. This is not only related to the development of police physique, physical ability, resilience, and police skills The overall situation in tactics and tactics is both professional and universally applicable to public security work and public security struggles. It is fully reflected in continuous combat capability, mobile attack capability, emergency response capability, ability to surmount obstacles, anti-fatigue capability, anti-load capability, and the use of various police tactics, weapons and equipment capabilities, and so on. The good physical fitness of the students in police academies is an indispensable and specially required fighting force in a peaceful social environment. For a long time, due to the heavy work tasks and insufficient police force, the civilian police often overloaded their work, irregular life, and poor working conditions. In addition, many civilian police's physical fitness declined, their physical fitness gradually deteriorated, and their health conditions were worrying. The age of death of serving police officers has been decreasing year by year. Many police officers died early and fell to their jobs. Only 47 police died during China's fight against the new crown pneumonia epidemic in 2020. Comrade Mao Zedong put forward in the article "Study on Sports" published in "New Youth" in 1917 that "the body is a vehicle of knowledge and a house of morality". The police have only a strong physique and high tactical skills. Only in order to meet the challenges of the increasingly severe public security situation, effectively combat all types of crimes and crimes, and complete various public security defense tasks. Without good physical fitness, any other quality will lose its support, and the public security team cannot be a strong fighting force. Strengthening physical fitness training, improving the police's anti-load, anti-fatigue ability and the movement function of various organ systems, and improving physical shape and psychological quality are the needs for learning and mastering the police physical skills, but also the practical needs of students in police academies.

2. Methodology

2.1 Literature method

Relevant literature materials are searched through academic websites such as domestic and foreign libraries, China Knowledge Network, etc., and relevant literature materials related to physical training of police college students are retrieved and collected.

2.2 Expert interview method

Through thematic interviews with a number of experts in the field of physical training, national coaches and athletes, and training experts responsible for police practice in police academies, the opinions and opinions of relevant experts and scholars on the academic issues related to this research were collected.

2.3 Hierarchical screening method

Make full use of experts' judgments on the importance of indicators, construct a judgment matrix of the importance of each indicator, and use the hierarchical screening method to obtain the weights of indicators at all levels.

2.4 Logic Analysis method

Comprehensive use of logical reasoning and demonstration, research and analysis of relevant materials that have been mastered, and summarize the scientificity and meticulous design of the entire research process.

3. Results and analysis

3.1 Judgment on Current Research Status of Sports Functional Science at Home and Abroad

Kinesiology first originated in the United States, and has been put into practice in many countries and regions. At first, it has obtained good experimental results in physical-dominated sports. Its core lies in the athlete's physical ability, which refers to the basic athletic ability of the athlete's body. The level of development is determined by the developmental form of body shape, physical function, and athletic quality. Athletic quality refers to various basic athletic abilities exhibited by the body during activities, and generally includes strength, speed, endurance, sensitivity, coordination, flexibility and other aspects. Based on the basic principles of kinematics, effective physical fitness refers to the various comprehensive athletic abilities shown by the human body when it is active. Generally, it mainly includes two aspects: basic physical abilities (exercise ability) and physical fitness. Two aspects. From the theory and practice in China in recent years and the expressions in "Sports Training", physical training refers to the use of physical exercises and other methods to improve the athlete's basic physiological form and improve the organism during the entire performance of sports training Performance and health level, as well as various exercises to develop athletic qualities. Professor Tian Maijiu of Beijing University of Physical Education defines physical training as: Physical training refers to the use of various physical exercises during exercise training to

effectively make a variety of changes in athletes' body and shape, promote the development of physical function and athletic quality, and improve Training of athletes' health.

3.2 Judgment of Physical Training Status of Students in Police Colleges

Modern sports training is characterized by the use of high-intensity, high-load, high-level training modes, designed to approach the extreme compliance of the body to the maximum, so that the body has a high level of stress[3]. Based on this, high-level sports training can only be carried out under the condition that the athlete has a high level of physical training, and it can ensure that the athlete gradually bears a greater load. In addition to the basic physical functional training, the police's police skills training also requires that the police must have a good psychological state in combat situations, and a highly developed physical training level can form a stable psychological state for the police. Investigation and research found that the physical training of students in police academies is in a state of fragmentation and lack of various software and hardware. Domestic police colleges generally lack unified and standardized teaching materials, severe shortage of professional teachers, shortage of training venues and sports equipment, irrational curriculum setting, less class allocation, weak scientific research ability, scarcity of student sports associations at all levels and lack of after-school exercise Departmental organization and professional guidance, police academies basically carry out teaching and training based on teacher experience, and single emphasis on training in physical fitness or use of equipment to improve law enforcement combat effectiveness.

4. Physical Training Methods of Police College Students from the Perspective of Kinematics

4.1 Running training method

Running training is the best and most economical way to develop physical fitness. By continuously running, you develop general endurance, that is, aerobic endurance, and by running fast, you develop speed and speed endurance, that is, anaerobic endurance. Running training is effective and comprehensive in improving basic physical qualities such as speed, endurance, and strength. Running is economical, does not require too many facilities, is in line with the actual training of police college students at all levels, and is not limited by the venue and time. Each police college student can choose a suitable running form according to his actual situation and physical fitness. Training with time. The forms of running are: uniform long-distance running, variable speed running, cross-country running (running alleys in the city), intermittent running, uphill running, downhill running, obstacle running, stair running, etc.

Male students in police colleges and students with poor physical fitness are suitable for long-distance running at constant speed, with reference to variable-speed running and intermittent running; female students in police colleges and young male students with average physical fitness can use variable-speed running, intermittent running, and cross-country running Downhill run, small slope uphill run to improve and maintain a good level of physical fitness; male students with excellent physical fitness and students with special fitness requirements can run cross-country, interspersed with variable speed runs with sprints, large slopes Run uphill, downhill, obstacles, stairs. Through the running training with a large amount of exercise, the special physical fitness required by the public security business is improved, and the physical fitness is maintained in a relatively good state to meet the severe public security service and law enforcement battles.

4.2 Swimming training method

Over 60% of the earth's surface is covered by water. In many cases, public security police need to carry out armed crossings and capture enemies in the water[4]. Through swimming training, they can obtain the freedom of maneuvering in the water, which will contribute to the successful completion of various marine police tasks. Swimming training can effectively promote the overall development of the human body, enhance physical fitness, and cultivate a good style of tenacity and hard work. Swimming training generally uses competitive swimming techniques, that is, breaststroke, crawl, backstroke, and freestyle. Other practical swimming techniques are: stepping on water, anti-frog breaststroke, sidestroke, and snorkeling. Learning the basic skills of swimming is the prerequisite for police to carry out armed crossing[5]. Only by learning the swimming skills can they capture the enemy in the water and effectively combat water crimes. Swimming training is a basic technique that frontline police should master. Students of police academy with excellent physical fitness, as well as criminal police, patrol officers and special police officers can insist on winter swimming.

4.3 Police body skills repetitive training method

Police body skills repetitive training method refers to the repeated training of a single police body skill. For example: continuous non-stop kicking or hollow boxing exercises for more than 5min; continuous capture of enemy fist or truncheon practice for more than 5 consecutive times; repeated gripping of the fist; truncation of the truncheon for more than 5min or quick gun drawing; repeated multiple times Freehand practice of the same capture or fall, etc. Police body skills repetitive training method is a simple and easy to popularize training method, which is not limited by the site environment. In addition, some police body technical actions often used in police academy students, other types of police officers also have a sense of identity and intimacy, which has practical value and can promote police learning and training enthusiasm. Police body skills repetitive training method is a

two-pronged training method, which not only improves the physical fitness of each police, but also trains the police body technology at the same time, so that the physical quality and the police body technology mutually promote and improve simultaneously.

4.4 Simple Equipment Training

The simple equipment training method refers to some training that meets the actual needs of public security with limited equipment or venues, and is mainly used to develop strength and special quality of public security. Simple and cheap training methods include: small barbell presses, dumbbell lifts and chest lifts, chest expander stretching, grippers to train finger grips, various weight-bearing walking, running, and ankle lifting exercises. Jump over obstacles, jump over windows, kick sandbags, climb stairs, push-ups under different support conditions, pull-ups, sit-ups and more. The simple equipment training method is a highly specialized training form suitable for specialized training performed by academics with excellent physical fitness. Students with average physical fitness can also use the chest expander to stretch, the grip to train finger grips, light weight walking, running, ankle lifting, kicking, and punching bag training.

4.5 Ball game training method

Collective items such as basketball, volleyball, and football are generally used for competition. Proper grouping should be conducted before the game. Physical conditions should be fully considered to avoid disparities in strength. Equivalent ball games can strengthen physical fitness and increase the enthusiasm of police college students for exercise. Ball games have greatly improved the speed, strength, sensitivity, flexibility and endurance of students in police academies, and can greatly strengthen the sense of collective honor and solidarity. The physical quality of the school students and the fostering of the team spirit of the police team is one thing that serves many purposes.

5 .Conclusion

At present, the research on physical training in the field of sports functional science has a certain degree of scientificity and applicability. However, in the training of police training, there is still a narrow study of one-sided pursuit of physical fitness, skills, tactical capabilities, sports intelligence and talent training. Research on physical training is still in a vacuum. With the rapid development of the times, the casualty rate of police officers has remained high in various national statistics, and the public opinion on the work attitude of police officers is generally unsatisfactory. There are obvious shortcomings in the real society and law enforcement process. Duties and reality force us to look at new perspectives and

strategies for physical training of police academies through scientific methods, positive attitudes, and meticulous processes from the perspective of kinematics.

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