

# The Analysis of the Flexible Quality Training of Tai Chi Athletes

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**Abstract:** In order to improve the performance of Taijiquan athletes, the training methods of flexibility and quality of Jiangxi athletes are discussed and researched. Finally, the pnf flexibility training method and thermal effect training method are selected to match the traditions of Taijiquan athletes in the Jiangxi Wushu sports team. Comparing the flexibility training methods, it is finally concluded that the traditional flexibility training methods of the Jiangxi Wushu Team Taijiquan athletes have fewer parts that can have an effect, and the training methods are relatively simple. The athletes have already developed adaptability to the traditional training methods. Produce better training effect. Through experiments, it is known that the combination of pnf training method and thermal effect training method can help improve the flexibility of athletes, and more parts are practiced, and the performance is greatly improved. It is recommended that the flexibility training of Jiangxi Wushu Team Taijiquan athletes should be used. The pnf training method is used in combination with the thermal effect training method to better improve the athlete's competitive performance.

**Keywords:** Tai Chi; Flexibility; Training

## 1. Foreword

Judging from the training situation of the Wushu team in Jiangxi Province, there is no major problem in the technical training of athletes at present, and the flexibility training method still belongs to the traditional leg press and kick, which is contrary to the concept of scientific training. The author has many years of experience in Tai Chi practice, has a clear understanding of related training methods, and has personally experienced traditional training methods, so I have the urge to study flexibility training methods. Through reading a large number of Taijiquan-related literature, the author discovered the problems in the process of learning Taijiquan-related knowledge. At present, the training methods of Taijiquan in China are relatively standardized, but there is no systematic training method for flexibility training. A large amount of literature proves that if Tai Chi athletes do not have good flexibility to support their performance in competitive competitions, they will definitely be greatly reduced. Therefore, in training, it is necessary to strengthen flexibility training. This article takes Jiangxi Province as an example. The Wushu sports team was used as the experimental object to conduct comparative research on different flexibility training methods and draw relevant conclusions.

### 1.1 Research status

In the article "Improvement and Exploration of Wushu Flexibility Training Method", Yan Jun mentioned that flexibility is one of the most basic qualities in life, and it is also a quality that martial arts athletes must possess. If you don't have good flexibility and support, you can't do it. In this article, it is also mentioned that the traditional flexibility training method is very painful and fearful to athletes, and the pnf training method mentioned in this article is minimal to the students' pain. Athletes can basically accept it, and it is more suitable for athletes in related directions to use<sup>[1]</sup>. With the development of the domestic sports industry and the gradual maturity of sports technology, sports circles at home and abroad have begun to attach importance to the practice of flexibility of athletes. In the article "Experimental Research on the PNF Method for Rhythmic Gymnasts from 5 to 6 Years Old to Carry out Flexibility Training," The current research status of pnf at home and abroad has a full explanation. At present, the foreign pnf training method has been fully applied, while the domestic is still in the exploratory stage. Although a large number of coaches have begun to try to use it, it has not yet been large-scale and high-level. The frequency is used in training<sup>[2]</sup>. Zheng Chuanfeng and Yang Jing conducted experiments on three different flexibility training methods in the article "The Influence of PNF Stretching Method on the Flexibility of the Lower Limbs of Students Majoring in Wushu". By comparison, it is finally concluded that the effect of pnf training method is the most obvious<sup>[3]</sup>. In the article "A New Method of Flexibility in Track and Field", the author also mentioned the pnf training method, which positively shows that the pnf training method has different effects on different events and different groups of people, but in the end it is positive<sup>[4]</sup>. Domestic aerobics programs have developed training in recent years. A search on the knowledge network found that the current domestic aerobics training has a very high flexibility training method. Flexibility is a type of physical training, and the current physical training level of aerobics is relatively high. Wushu researchers can draw lessons from its training system to improve the relevant level of Wushu events<sup>[5]</sup>.

## 2. Research objects and methods

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## 2.1 Research object

This study takes 8 Taijiquan athletes from the Wushu Sports Team of Jiangxi Province as the research object

## 2.2 Experimental method

(1)Documentary data method. Through the library of Jiangxi Normal University and CNKI and other electronic resource databases, a large number of researches on the training methods of pliability of Taijiquan athletes as well as literature materials related to pliability have been searched and downloaded.

(2)Interview method. In order to better understand the conditions of the subjects and the conditions of usual training, we specially interviewed the expert coaches of the Jiangxi Wushu sports team, and interviewed the professors of Jiangxi Normal University in related majors, so as to determine the traditional training methods. Specific content.

(3)Experimental method. According to the related literature of Taijiquan flexibility training, the corresponding flexibility training method was determined. Eight professional Taijiquan athletes from the Jiangxi Wushu Sports Team were randomly divided into groups of four. The experimental group adopted pnf training method and thermal effect. The training method is a method of combining training. The control group used the same training method as the original flexibility exercises. The experiment period was 4 weeks, and special flexibility exercises were performed twice a week, each time for one hour. The experiment carried out pre-test and post-test. The sitting position body forward bending index, and the stretching degree of the athlete's legs, waist, and shoulders are measured to determine the effects and effects of different flexibility training methods on the athletes.

## 3. Research results and analysis

(1)Traditional martial arts flexibility training method. Through interviews and experiments, it is learned that the pliability training method used by the Jiangxi Wushu sports team is to perform pad presses after warming up, mainly to stretch the back muscles of the legs, and increase the athletes' leg presses by thickening the thickness of the mat. Difficulty, followed by rapid kicking to stretch the leg muscles and the back surface line. The fascia is opened, and finally the thong is used to increase the difficulty of the athlete's kick. It can be seen that the flexibility training method of the Jiangxi Wushu Sports Team is relatively simple and needs to be improved. Most of the training parts are the legs, and the flexibility of the waist and shoulders is rarely involved.

(2)Propriosensory neuromuscular promotion. Through reading related materials and literature, and conducting telephone interviews with relevant experts, I learned that this training method, proprioceptive neuromuscular facilitation, or pnf training for short, is currently a popular and popular flexibility training method at home and abroad. Its operation It is simple and effective, which has benefited a lot of sports events, but there are still few applications in martial arts. Therefore, this training method is used in this experiment. This technique is used before the muscles are stretched again. , Perform isometric contraction for a short time before stretching. The pnf training method will have different effects in different projects. As there are few related documents on martial arts, only a few words explain the training method. During this experiment, the author assisted an athlete with two people, stretched the waist by sitting and turning, stretched the iliopsoas muscle by lying down, and stretched by lying on the knees + cobra stretching. Spine and stretch rectus abdominis relieve back pain.

(3)Thermal effect training method. This training method is learned by the author by consulting relevant literature. Its definition is: before any stretching training, perform the corresponding thermal effect processing, so that the training effect is improved. In addition to the usual warm-up activities, there are also Massage, pushing and pulling, and vibration are all training methods within the thermal effect. In this experiment, the author used a fascia gun to shake and relax each member of the experimental group before training. The time was ten minutes, and then after the relaxation was completed Conduct training.

## 4. Conclusions and recommendations

(1)Suggestion. Through the experiment of Jiangxi Province Wushu Sports Team and the reading of related literature, the following conclusions are drawn: Taijiquan athletes in Jiangxi Province Wushu Sports Team usually have a single flexibility training method, and there are too few stretching parts, which can not fully improve the athletes. The pliability quality of the athletes can not provide support for better athletic performance, and when I understand the athletes, it is found that some students have adapted to the traditional practice methods and cannot continue to improve their related flexibility.

(2)Suggestions. According to the final conclusion of the experiment and the comparative analysis of different training methods, the following suggestions are put forward. It is recommended that the Taijiquan athletes of the Jiangxi Wushu Sports Team adjust the flexibility training method according to the sports quality required by the Taijiquan sports. It is recommended to adopt The combination of pnf training method and thermal effect training. Experiments have shown that the combination of these two training methods is good for improving the flexibility of athletes. Therefore, it is recommended that relevant coaches make appropriate adjustments according to this training method to improve flexibility. Training science This will improve the overall competitive level of the sports team, continue to add luster to our province and our country, and win more gold medals for our country.

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