



Designing of Choreography Training Program for Wushu Daoshu

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Abstract

Background and Aims: Regarding the choreography of Wushu routines, the Chinese Wushu Association's "Basic Explanation of Wushu Routines" points out that, with the development of society, people's values and functions of Wushu are changing. Each Wushu action is linked together to form a dynamic and continuous picture, which shows its fascinating charm and high aesthetic and ornamental value. The purpose of this study was to design and choreograph Wushu movements for Wushu Daoshu competitions.

Methodology: This study was quasi-experimental method. The samples included 30 Wushu school senior class students, 9 Wushu routine experts, and 9 Wushu judges. Through expert interviews, simulated competition, and practice, the routine movements of the top 16 athletes in the 2021 National Wushu Routine Championship were analyzed, and then the Wushu movement arrangement and training plan of the Wushu Daoshu competition were designed, with an IOC value of 0.74. To confirm the efficiency of the Wushu choreography, the training experiment will be conducted with the students, and a simulated competition of Wushu Daoshu will be conducted with the students before and after the experiment. The results of the scores before and after the experiment will then be compared to determine the effectiveness of the designed Wushu movement choreography through a t-test.

Results: Wushu Daoshu set arrangement can be divided into three main parts: (1) the basic Daoshu skills must be selected (2) a set of technical combinations of movements (3) jumping difficulty movements, which set of technical combinations of movements is an important basis for the arrangement of the set. The results of the designed Wushu movement choreography in the Wushu Daoshu program were scored by a Wushu referee and compared between the pre-and post-trial scores, and the results showed that the training of the researcher's designed Wushu movement choreography in the Wushu Daoshu program was effective in obtaining higher scores in Wushu Daoshu program competitions.

Conclusion: The average score gap between the two groups is more obvious. The Wushu movement choreography in the Wushu Daoshu competition designed by the researchers is effective, and it can achieve higher results in the Wushu Daoshu competition.

Keywords: Wushu; Taolu; Wushu Daoshu; Choreography

Introduction

Regarding the current situation of Wushu, competitive Wushu occupies the mainstream position of Wushu (Li, 2023), in "Research on the Development of Competitive Wushu Routines", stated that Wushu is the representative of Chinese national traditional sports, the treasure of Chinese national culture, and the national treasure of China. It combines the functions of self-defense, fitness, cultivation, and nourishment in one, and has the relationship of flesh and blood with religion, philosophy, aesthetics, ethics, military science, Chinese medicine, traditional literature and art, and the native Wushu can be said to be a microcosm of the Chinese civilization of 5,000 years, and Wushu needs to be inherited, and even more needs to be developed. After the founding of new China, with the political, economic, and cultural development of China, the East and the West are constantly exchanging, collision, and fusion cultures, in this context, to adapt to the trend of the times, on behalf of the direction of development of Wushu competition Wushu came into being. Competitive Wushu is the splendor of modern Wushu. Among them, Wushu Daoshu is one of the more characteristic items in Wushu routines (Xu, 2011) pointed out in "On the aesthetic value of Wushu Daoshu pointed out Wushu Daoshu" that the Daoshu





has been a symbol of hegemony and power in Wushu since ancient times, and it has the reputation of "the gall of a hundred soldiers". From the moment the "Dao" was introduced, the Daoshu has defined in a concrete and systematic way the methods and techniques of using the knife. The Daoshu has gone through the embryonic period of the Stone Age and the embryonic period of the Three Dynasties to the Qin Dynasty, and then the growth and initial stereotyping period of the Three Kingdoms, transforming the "Dao" from the "living Dao" of the primitive society to the "skill dao" of the more ornamental and practical.

Wushu Daoshu is a form of Wushu expression that combines skill, power, and art. It originated in the Stone Age, went through the Xia, Shang, and Zhou Dynasties to the embryonic period during the Qin Dynasty, and finally formed a complete routine system during the Three Kingdoms period. The techniques of " Dao" are relatively simple to learn and powerful, so many Wushu Daoshu schools throughout history have used it as an important martial art technique. and many other " Dao" techniques. The study of modern Daoshu also includes these basic movements, which require the practitioner to possess physical qualities such as flexibility, speed, endurance, and strength, and at the same time lay the foundation for the practitioner to improve his or her level and overall mastery of Wushu Daoshu skills.

Wushu training is a kind of exercise process to stimulates individual talent and stimulates the human body's potential to develop Wushu skills. The basic principles of Wushu training include: the principle of distinguishing between practical situations; the principle of rigorous, difficult, practical, high-volume training; the principle of combining long-term and cyclic training; the principle of consolidation and improvement; the principle of combining comprehensive training and specialization; the principle of systematization; and the principle of intuition (Huang, 2005)

Regarding the choreography of Wushu routines, the Chinese Wushu Association (2020) "Basic Explanation of Wushu Routines" points out that, with the development of society, people's values and functions of Wushu are changing. Modern competitive Wushu movements are not defensive techniques on the battlefield, but rather techniques for reproducing movement, spirit, qi, force, and other factors when performing techniques. It has developed into a competitive sport. As a unique modeling performing art, competitive Wushu is completed in the movement of time and space, and each Wushu action is linked together to form a dynamic and continuous picture, which shows its fascinating charm and high aesthetic and ornamental value.

Current research on Wushu Daoshu focuses on several aspects such as biochemical analysis of intensity loads in Wushu sports, the performance value of Wushu Daoshu, the content of Wushu Daoshu choreography, and comparative analysis of Wushu rules. Most of the current studies are limited to one aspect only. Based on the existing studies, this study aims to study and analyze in depth the historical development of the competition rules of Wushu Daoshu sports and to conduct a comparative analysis. In addition, the study will also examine the progressive development of Wushu rules at different stages, while analyzing the impact of rule changes on technical progress. The research conducted is systematic, comprehensive, and in-depth, ensuring that the information is presented formally objectively, and concisely, with accurate terminology and grammatical correctness. Therefore, this study aims to investigate the stages of development and the main characteristics of Wushu Daoshu skills. The results will provide a theoretical basis and practical support for the development of the final performance and technical performance of the junior students.

Objectives

Main Objective:

[530]

Citation



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To develop a Wushu Daoshu choreography training program to improve final performance.

Subsidiary Objectives:

1. To study the current situation of Wushu students.
2. To develop a Wushu Daoshu choreography training program to optimize the training process for each learner by improving their needs and goals
3. To confirm a Wushu Daoshu choreography training program to optimize the training process for each learner by improving their needs and goals.
4. To compare the before and after results of the 8-week experiment.

Literature Review

Wushu routine

Wushu routine is a series of combinations of movements that contain the meaning of skill and attack and defense, it is a whole set of practice forms compiled with the change rules of contradictory movements such as an attack, defense, advance, and retreat, static, rigid, flexible, virtual and real, and it is also called "routine movement". Each school of Chinese Wushu has many routines that express the characteristics of its school, and the routines are mostly progressive, beginners and people who have been practicing for a long time learn different routines. Sets are a unique form of Chinese Wushu and a major technical feature that distinguishes them from other Wushu (Xu, 2017).

Elements of Wushu Daoshu

1. Wushu Daoshu

Wushu Daoshu: Wushu Daoshu is a type of Wushu instrument. Nowadays, the commonly known and used Daoshu is a kind of short weapon in Wushu equipment. Single Daoshu to wrap the head wrapped brain, chopping, chopping, teasing, hanging, Zha, sweeping, cutting, chopping, pointing, and other Daoshu skills and the coordination of the other hand and a variety of footwork, jumping and other movements constitute the structure of the routine. When practicing the Daoshu, the sound of the Daoshu whooshes and swishes, presents a brave, strong, and powerful image, so there is the saying "The Daoshu is like a fierce tiger" (He, 2013).

2. Contents of Wushu Daoshu

Wushu Daoshu is one of the traditional Chinese Wushu, which is a technique using the Daoshu as the main weapon. The origin of Wushu Daoshu can be traced back to the period of ancient warfare, and it is an important part of ancient Chinese military culture. The techniques of Wushu Daoshu include a variety of aspects such as Daoshu techniques, footwork, bodywork, maneuvers, eye techniques, breathing techniques, and so on. The Daoshu technique is the core of Wushu Daoshu, which includes the basic usage of the Daoshu, the attack and defense techniques of the Daoshu, the changes and combinations of the Daoshu, and so on. Footwork is an important part of Daoshu art, which helps the Daoshu fighter to better control the position of the body and the Daoshu, and thus better attack and defense. Stance refers to the body posture and movements of the Daoshu fighter, which can help the Daoshu fighter to better control the position and direction of the Daoshu, and thus better attack and defense. Hand techniques refer to the hand movements of the Daoshu fighter, which help the Daoshu fighter to better control the position and direction of the Daoshu, and thus better attack and defense. Eyesight is the movement of the eyes of a Daoshu fighter, which helps the fighter to observe the opponent's movement and position better, and thus to attack and defend better. Breathing is the Daoshu fighter's breathing technique, which helps the Daoshu fighter to better control the body and the position of the Daoshu, to better attack and defend (Zhang, 2006).





Wushu Daoshu training requires equipment such as Daoshu, Daoshu frames, and wooden maniples, as well as training in a variety of areas such as basic skills training, routine training, and sparring training. Basic training includes training in flexibility, strength, endurance, reaction, and other aspects of the body. Routine training refers to the practice of Daoshu skills by certain movements and sequences, thus improving the technical level of the Daoshu. Sparring training refers to the simulation of actual combat between the Daoshu fighter and the opponent, thus improving the Daoshu fighter's ability in actual combat. Wushu Daoshu is not only a traditional culture but also a fitness sport. Through the training of Wushu Daoshu, it can improve physical fitness, enhance physical fitness, exercise willpower, and self-protection ability. At the same time, Wushu Daoshu can also cultivate the self-confidence, courage, and perseverance of the Daoshu fighter, to better face the challenges in life and work (Han, 2005).

Wushu Daoshu is a very valuable form of Wushu, which can not only pass on Chinese culture but also improve people's physical fitness and self-protection ability. We hope that more people will understand and learn Wushu Daoshu so that they can better protect themselves and their families. (<https://wenku.baidu.com> 2023/10/4)

3. Competition Wushu Daoshu

Competition Wushu Daoshu refers to a form of performance or competition in which the Daoshu is used as a competitive item in a Wushu competition. This type of competition is designed to judge the competitor's performance and level of skill in Wushu Daoshu. Competition Wushu Daoshu usually includes the following aspects:

Routines: Competitive Wushu Daoshu often involves the performance of fixed

Daoshu routines, in which the competitor is required to demonstrate a series of Daoshu movements by a prescribed routine. These routines may be traditional Wushu routines or specially designed according to the competition rules.

Wushu Daoshu technique: Judges usually grade competitors based on their Daoshu technique. This includes aspects such as accuracy, fluidity, strength, and speed of the Daoshu technique. A high level of skill is very important for high scores. **Difficulty of Moves:** Competition Wushu Daoshu may include some difficult Daoshu moves such as spins, throws, and continuous strikes. The difficulty of these maneuvers will affect the competitor's score.

Expression and Emotion: In addition to technique, competitors need to convey the meaning and emotion of the Daoshu through facial expression, body language, and emotional expression to make the performance more appealing. Competition Wushu Daoshu can be performed individually or as a team, and the rules and scoring criteria will vary depending on the competition and organization. It is designed to demonstrate a competitor's skill and performance level in the field of Wushu Daoshu and is usually scored by a specialized panel of judges to determine winners, losers, and placements in the competition. This form of competition can be performed and passed on both as a competitive sport and as part of the Wushu tradition.

Action Choreography

Arrangement refers to arranging things in a certain order. As the name suggests, action choreography is to organize different actions to form a complete operational action. Huang Junya pointed out that action choreography is a process of organically connecting groups into routines within a certain time and space according to the characteristics of sports events. Xu (2011) pointed out that action choreography is a prerequisite for excellent results. It should not only reflect the technical advantages and style characteristics of athletes but also attract the attention of referees and audiences in the competition. Zhang (2012) believes that action choreography should reflect its advantages, and



the process of choreography should pay attention to the level changes of time and space to increase performance effects. The essential attribute of Wushu is characterized by offensive and defensive techniques. Therefore, the action arrangement of Wushu routines should reflect the essential needs of Wushu while considering artistic beauty. Zhang (2006) put forward measures based on the factors that affect the arrangement of Wushu routines and pointed out that the arrangement of movements should highlight the style characteristics of athletes, and perfectly combine prescribed movements and novel movements. Liu (2009) pointed out that there is a direct relationship between the choreography of movements and the score of the exercise. The choreography should pay attention to the coherence between movements, fully reflect the strength, style, and rhythm, and rationally arrange the content and difficulty of movements.

To sum up, action choreography is an overall creative process. Arrangements should not only highlight the style characteristics of the project but also pay attention to the transition between actions to improve the artistic quality of action choreography.

1. Elements of choreography

Arrangement elements include content, structure, and layout in three aspects. Zhang Qingshu pointed out that the elements of choreography include: action elements, rhythm elements, time elements, and space elements (action direction, route changes). Zhao Na (2013) believes that the elements of action choreography include action elements (body posture, movement speed, movement direction, movement route, movement range, movement rhythm, movement frequency), time elements, space elements (movement direction, spatial level), and music. Elements, flexible use of elements, perfect routine arrangement. Huang (2005) studied the choreography of rhythmic gymnastics.

Combined with expert interviews and questionnaire surveys, it is concluded that the choreography elements of rhythmic gymnastics movements mainly include the external performance level with the completion of movements and accompaniment music as the basic elements and the space-time carrier level that constitutes the existence of movements, which can be subdivided into movement elements (Body movements, equipment movements, combination of body movements and equipment movements, cooperative actions), music elements (time rhythm, music style), space elements (action direction, ground space, formation, utilization of vertical space), time elements. He (2013) analyzed the movement technology, range, speed, and other indicators of sports dance choreography, and pointed out that the elements of movement choreography can be divided into movement elements, space elements (direction routes, etc.), rhythm elements, and time elements (the whole set) time, single action time, etc.).

To sum up, the choreography element is the basis for the existence of a complete set of movements, which is mainly divided into two levels, one is the external performance level, which is based on the completion of movements and accompaniment music as the basic movement elements and music elements; The space-time carrier level includes time elements and space elements, and there is an interdependent and mutually restrictive relationship between them, which together constitute a complete set of actions.

2. The choreography of other Wushu routines

Liu (2009) borrowed the "golden section" method, introduced it into the arrangement of Changquan routines, and made a theoretical attempt. He believed that the coincidence of the climax point and the golden section point could show the best tension effect of the rhythm. Han (2005) pointed out that the comprehensive use of movement difficulty and connection difficulty is a highlight of the competition, but the athletes' arrangement is almost the same, which looks like a prescribed movement. It is recommended to modify the rules appropriately. For innovators who dare to try difficult

movements, they should Give corresponding points to encourage. Xu (2017) believed that most athletes are similar or even identical in the selection of difficult movements, and suggested that athletes consider personal style characteristics in the arrangement of the entire set of movements, enrich the diversity of movement difficulty and connection difficulty, Increase viewing. The choice of choreography strategy and the highlights of technological innovation from the perspective of combining theory and practice, to maintain the leading position of Chinese Wushu in the international arena. Chen (2013) proposed to strengthen the choreography, reporting, and training of difficult movements for college Wushu coaches in Hunan Province, strengthen the review of difficulty registration forms and scoring forms, and promote the continuous improvement of the competitive level of Wushu Movement Choreography routines. Zhang (2012) analyzed the difficulty arrangement and completion status of college female fencing athletes in Hunan Province in her research and believed that the arrangement of movements can help promote the rapid improvement of the level of Wushu routines. Zhang (2012) pointed out that the current choreography of difficult movements is mostly jumping, and the choreography of B-level connection difficulty accounts for the largest proportion. It is suggested that both the difficulty of movements and the level of drills should be considered.

To sum up, experts and scholars have analyzed the problems existing in the choreography of other Wushu routines from different perspectives and put forward suggestions, providing ideas and experiences for reference to better improve the quality of choreography.

Conceptual Framework

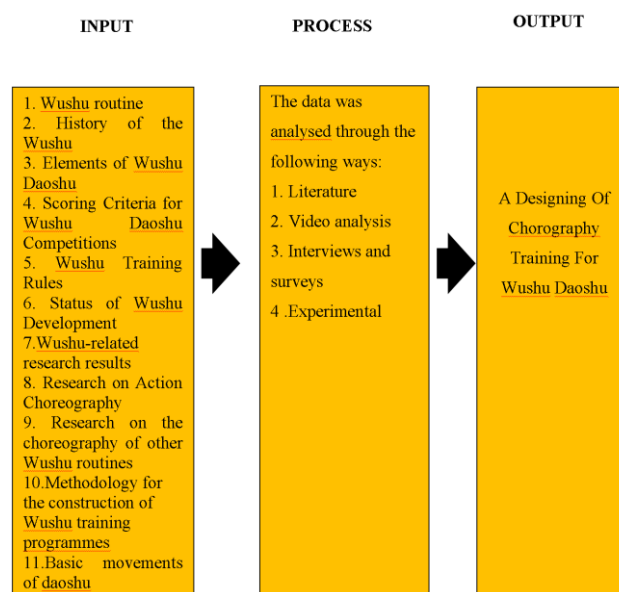


Figure 1 Conceptual Framework

Methodology

Populations: The students in this study were from the Shaolin Wenwu School in Jiyuan, Henan Province, which has a total of 500 students divided into three levels of high school and low school, and the school mainly teaches Wushu routines and sparring. The school uses a half-day training program.

Samples: The best 30 students will be selected from the 100 students who must have 4 years of experience in WUSHU through the school sports day in May. The top 30 students will be selected as



the subjects of the experiment because the number of 100 students is too large for the experiment to be managed easily.

Research Participants

1. The five experts used to validate the content of the interviews IOC were three university professors of Wushu, one senior sports referee, and one senior Wushu coach.

2. Interviews with experts yielded the current status of Wushu Daoshu routine choreography, with a total of nine professors. 3 university professors, 3 senior Wushu instructors, and 3 national-level referees.

3. The five experts used to validate the design of the study IOC were three university professors of Wushu, one senior sports referee, and one senior Wushu coach.

4. The 9 referees were used for the experiment, including 5 national first-level referees, 2 national referees, and 2 senior coaches

Research Design: This research design was a group pretest-posttest design. The study is 8 weeks long, with 5 days of practice per week and 2 hours of practice per day.

Research tools

1. Literature
2. Interview form (IOC > 0.74)
3. Wushu Daoshu training program (IOC > 0.8)
4. Scoring criteria of the Wushu Daoshu competition

Data Analysis

1. Information derived from the interviews was analyzed using the literature analysis method
2. Information derived from the focus groups was analyzed using the literature analysis method
3. Results derived from the experiments were validated using the T-test
4. Scoring criteria for Wushu competitions

The total score of the Wushu routine competition is 10 points, of which 5 points are for the quality of the movements in Group A, 3 points for the level of rehearsal in Group B, and 2 points for the difficulty score of the jumps in Group C.

Research Process: This study is divided into 4 steps as follows:

Step 1: review of literature and research

Step 2: Gathering Ideas, Reviewing Information, and Forming a Conceptual Framework.

Step 3: Develop a conceptual framework.

Step 4: Summarize and write the final report.

Results

1. Exploring existing problems and misconceptions of Wushu movement choreography in Wushu Daoshu competitions.

Interview Methodology

Based on the results of interviews with Wushu experts, it was found that there are serious problems with the choreography of set movements in Wushu Daoshu competitions. The set movement choreography is not creative, which reduces the spectacle of the competition. Therefore, the action choreography should reflect its rationality, clarify the attack and defense techniques of the action, and reflect the creativity of the choreography. According to the interviews with the experts, the current situation and problems of the choreography of Wushu Daoshu are as follows:



1. Mechanized choreography: Some martial artists pay too much attention to the mechanical execution of movements at the expense of the artistic sense and fluidity between movements in performance.

2. Lack of real-world considerations: some of the movements are choreographed with too much emphasis on the performance effect while ignoring the practicality of the actual combat and the lack of real-world Daoshu action.

3. Excessive Pursuit of Fancy: Some martial artists may place too much emphasis on fancy movements to the detriment of the actual effects of the movements and the spirit of the Wushu within.

4. Insufficient innovation: Some contestants may be too conservative and lack attempts at innovative maneuvers and unique choreographies, making the competition performances seem monotonous and boring.

5. Lack of emotional expression: Some performances lacked emotional expression, making it difficult for the audience to feel the inner strength of the martial artist and the cultural connotations behind the Daoshu.

6. Neglecting the totality of the routines: Some martial artists may pay too much attention to individual movements and neglect the articulation and coherence of the overall routines, thus affecting the effectiveness of the overall performance.

Taken together, to improve the level of movement choreography in Wushu Daoshu competitions, it is necessary to balance practicality and performativity, focus on the integrity of the overall routine, and at the same time enhance innovation and emotional expression.

In addition, some key details need to be paid attention to in the choreography and training of Daoshu in Wushu sets:

1) Focus on basic Gongfu to ensure accurate posture and smooth movements. A good foundation is the key to becoming proficient in the set. Movements should be fluid and natural, ensuring that each blade is executed clearly and effectively.

2) Focus on body co-ordination to ensure that movements not only look good but work in practice. Maintain accuracy of posture and ensure that the Daoshu is positioned and angled correctly to prevent mishaps or injuries.

3) Pay attention to the expression of emotion. Daoshu is not only a demonstration of technical movement but also an art that conveys emotion and intent through movement. Attention is focused on the fine execution of the technique, such as hand and foot coordination, to ensure that each movement is up to standard.

4) Pay attention to the coordination of breathing, keep breathing steady, and use breathing reasonably to improve the strength and effect of movements. Focus on breath control when practicing the routines to maintain good physical strength and endurance.

5) Focus on rhythm, keep the balance and flow between moves, and don't let the movements seem stiff or rushed.

6) Focus on self-correction, and continually improve the details of your movements through repetition and observation.

2. Development of a training program to improve the performance of choreographed training in Wushu Daoshu routines

Through interviews with professional Wushu coaches and experts, the current set choreography of Wushu Daoshu events was analyzed to assess the strengths and weaknesses of the movement techniques, routines, and areas for improvement that would help the school's students, and the information collected was collated based on analyzing the top sixteen set movements of the men's



Daoshu events at the National Wushu Set Championships in 2021. In addition, to deal with the current problems in the movement choreography of Wushu Daoshu routines, it is necessary to constantly practice, and improve the physical quality of students and the quality of movements to ensure that the movement choreography can have a higher upward mobility, and to ensure the safety of the students in completing the high degree of difficulty movements.

First, students in the experimental group will be given a Wushu simulation match before the experiment begins and scored by three sets of judges. Then, students in the experimental group will again be given a Wushu simulation match at the end of the experiment and scored by three sets of judges.

The scoring results for both sets of judges are as follows.

Table 1 Pre-experimental score

| Number | Name | Sex | Group A | Group B | Group C | Score |
|--------|----------|-------|---------|---------|---------|-------|
| 1 | Chu ** | male | 5.00 | 2.71 | 1.95 | 9.66 |
| 2 | Xu** | male | 5.00 | 2.70 | 1.95 | 9.65 |
| 3 | Jiang ** | male | 5.00 | 2.74 | 1.90 | 9.64 |
| 4 | Song ** | male | 4.80 | 2.79 | 2.00 | 9.59 |
| 5 | Wang ** | male | 5.00 | 2.68 | 1.90 | 9.58 |
| 6 | Wang ** | male | 5.00 | 2.68 | 1.90 | 9.58 |
| 7 | Feng ** | male | 4.90 | 2.71 | 1.95 | 9.56 |
| 8 | Jia ** | male | 5.00 | 2.68 | 1.85 | 9.53 |
| 9 | Hou ** | male | 4.90 | 2.72 | 1.90 | 9.52 |
| 10 | Zhang ** | male | 4.90 | 2.72 | 1.90 | 9.52 |
| 11 | Xiao ** | male | 4.90 | 2.71 | 1.90 | 9.51 |
| 12 | Zhang ** | male | 4.90 | 2.75 | 1.85 | 9.50 |
| 13 | Li ** | male | 4.90 | 2.70 | 1.90 | 9.50 |
| 14 | Chi ** | male | 4.90 | 2.70 | 1.85 | 9.45 |
| 15 | Chen ** | male | 4.90 | 2.74 | 1.80 | 9.44 |
| 16 | Liu ** | male | 4.90 | 2.68 | 1.85 | 9.43 |
| 17 | Huang ** | male | 4.80 | 2.71 | 1.90 | 9.41 |
| 18 | Wang ** | male | 4.90 | 2.70 | 1.80 | 9.40 |
| 19 | Chai ** | male | 4.80 | 2.70 | 1.80 | 9.30 |
| 20 | Cheng** | male | 4.80 | 2.70 | 1.80 | 9.30 |
| 21 | Shi ** | women | 5.00 | 2.79 | 1.90 | 9.69 |





| Number | Name | Sex | Group A | Group B | Group C | Score |
|--------|----------|-------|---------|---------|---------|-------|
| 22 | Zhang ** | women | 5.00 | 2.71 | 1.90 | 9.61 |
| 23 | Gao ** | women | 5.00 | 2.70 | 1.80 | 9.50 |
| 24 | Zhang ** | women | 4.90 | 2.70 | 1.90 | 9.50 |
| 25 | Sun** | women | 4.90 | 2.68 | 1.90 | 9.48 |
| 26 | Sun ** | women | 4.80 | 2.68 | 1.95 | 9.43 |
| 27 | Liu ** | women | 4.90 | 2.72 | 1.80 | 9.42 |
| 28 | Zhang ** | women | 4.90 | 2.71 | 1.80 | 9.41 |
| 29 | Sun ** | women | 4.90 | 2.70 | 1.80 | 9.40 |
| 30 | Shi ** | women | 4.80 | 2.74 | 1.80 | 9.34 |

Table 2 Post-experimental score

| Number | Name | Sex | Group A | Group B | Group C | Score |
|--------|----------|------|---------|---------|---------|-------|
| 1 | Chu ** | male | 5.00 | 2.81 | 2.00 | 9.81 |
| 2 | Xu** | male | 5.00 | 2.81 | 2.00 | 9.81 |
| 3 | Jiang ** | male | 5.00 | 2.79 | 2.00 | 9.79 |
| 4 | Song ** | male | 5.00 | 2.79 | 2.00 | 9.79 |
| 5 | Wang ** | male | 5.00 | 2.79 | 2.00 | 9.79 |
| 6 | Wang ** | male | 5.00 | 2.75 | 2.00 | 9.75 |
| 7 | Feng ** | male | 5.00 | 2.75 | 2.00 | 9.75 |
| 8 | Jia ** | male | 5.00 | 2.74 | 2.00 | 9.74 |
| 9 | Hou ** | male | 5.00 | 2.73 | 2.00 | 9.73 |
| 10 | Zhang ** | male | 5.00 | 2.72 | 2.00 | 9.72 |
| 11 | Xiao ** | male | 5.00 | 2.72 | 2.00 | 9.72 |
| 12 | Zhang ** | male | 5.00 | 2.72 | 2.00 | 9.72 |
| 13 | Li ** | male | 5.00 | 2.72 | 2.00 | 9.72 |
| 14 | Chi ** | male | 5.00 | 2.71 | 2.00 | 9.71 |
| 15 | Chen ** | male | 5.00 | 2.71 | 2.00 | 9.71 |
| 16 | Liu ** | male | 5.00 | 2.71 | 2.00 | 9.71 |
| 17 | Huang ** | male | 5.00 | 2.70 | 2.00 | 9.70 |





| Number | Name | Sex | Group A | Group B | Group C | Score |
|--------|----------|-------|---------|---------|---------|-------|
| 18 | Wang ** | male | 5.00 | 2.70 | 2.00 | 9.70 |
| 19 | Chai ** | male | 5.00 | 2.70 | 2.00 | 9.70 |
| 20 | Cheng** | male | 5.00 | 2.70 | 2.00 | 9.70 |
| 21 | Shi ** | women | 5.00 | 2.80 | 2.00 | 9.80 |
| 22 | Zhang ** | women | 5.00 | 2.79 | 2.00 | 9.79 |
| 23 | Gao ** | women | 5.00 | 2.75 | 2.00 | 9.75 |
| 24 | Zhang ** | women | 5.00 | 2.74 | 2.00 | 9.74 |
| 25 | Sun** | women | 5.00 | 2.72 | 2.00 | 9.72 |
| 26 | Sun ** | women | 5.00 | 2.71 | 2.00 | 9.71 |
| 27 | Liu ** | women | 5.00 | 2.71 | 2.00 | 9.71 |
| 28 | Zhang ** | women | 5.00 | 2.70 | 2.00 | 9.70 |
| 29 | Sun ** | women | 5.00 | 2.70 | 2.00 | 9.70 |
| 30 | Shi ** | women | 5.00 | 2.70 | 2.00 | 9.70 |

The results of the experiment showed that the scores of the experimental group were higher than those of the control group, and the performance level scores of group B were the most significant. Zhang Hailang, the referee of group B, pointed out that the students of the experimental group had better demonstrated the essence of the Wushu routines in the simulation competition, the meaning of the attack and defense of the routines was accurate, and the creativity of the contents of the routines was good. Liu Haibo, the judge of group B, pointed out that the students of the experimental group were generally higher than those of the control group, and that the accuracy and specification of the basic Daoshu skills of the experimental group were good.

Group A referee Wang Yi pointed out that the experimental group's students' basic Wushu skills were more solid with better specifications, and Group A referee Ning Biao pointed out that the experimental group's students' routine's detailed treatment and the overall coherence of the routine movements were very good. Judge Shen Yinan pointed out that the jumping difficulty of the experimental group was more stable and the selection of difficulty was more reasonable, and Judge Yang Shunhong pointed out that the position of the difficult movements in the routines of the experimental group was more reasonable, which allowed the students to distribute their physical energy more comfortably.

Comparison of scoring results of choreographed martial arts movements in Wushu Daoshu. This is a comparison of the mean scores of the final performances of the researcher's designed choreography of Wushu Daoshu training. The statistical test used for the comparative analysis was the independent t-test.

The main hypothesis was that there was no significant difference in the evaluation scores of the Wushu Daoshu routine choreography before and after the experiment. It was assumed that the mean difference = 0 and the level of significance was 0.05.



The results of the comparison of the judges' scores are as follows:

Table 3 Comparison chart of experimental results

| Comparison Topic | Pre-experimental score | | Post-experimental score | | t | P |
|--|------------------------|------|-------------------------|------|-----|--------|
| | \bar{x} | S.D. | \bar{x} | S.D. | | |
| Simulation of experimental results of competitions | 9.49 | 0.03 | 9.73 | 0.05 | -13 | 0.006* |

*P<0.05

The results show that T-value = - 13, P-value = 0.006, and P-value is less than 0.05. Therefore, it can be concluded that there is a difference between the mean scores before and after the experiment of Wushu Daoshu routine choreography. The Wushu Daoshu movement choreography training designed by the researcher is effective and it can lead to higher scores in Wushu Daoshu event competitions.

Discussion

The results of the study show that the Wushu Daoshu program must be reasonably choreographed to achieve excellent performance. First of all, the choreography and placement of the set movements and the route planning of the set are the key, these are consistent with what is mentioned in (Chen, 2022), "Analysis of the Choreography of Stick Sets", athletes should follow the technical characteristics of Wushu to dare to be innovative, discover the breakthrough point of the set choreography, and integrate their personality characteristics into the set. Inheriting the tradition, carrying forward the tradition, tracing the history of the stick, integrating the characteristics of modern competitive Wushu which are high, difficult, new, beautiful, and stable, researching and digging deeper into the offensive and defensive meanings and technical methods of the stick in traditional Wushu, extracting the very representative movements and avoiding the choreography of some non-Wushu movements. (Li, 2023) Wushu sets of self-selected long fist sets of choreographed movement elements, the number of basic movements is small, the frequency is low, and the movement articulation is monolithic, which affects the fluency of the rehearsal and the visual ornamental effect, and thus affects the score of the level of the rehearsal; the difficulty of the movement level is irrationally selected, and the type is selected in a single way, which restricts the athletes' athletic ability and the effect of the rehearsal to show the score of the difficulty, the score of the difficulty of the movement, and the score of the difficulty of the connection. Difficulty score, movement difficulty score, connection difficulty score have no significant correlation with the score of rehearsal level, but the reasonableness of the choreography is highly correlated with the score of rehearsal level; the distribution of difficulty paragraphs is uneven, the difficulty of the first and second paragraphs is concentrated, and the difficulty of the third and fourth paragraphs are vacant, which affects the overall layout of the set, and the third paragraph in the paragraph has a correlation with the level of rehearsal and shows significant correlation, which influences the final score of the level of rehearsal.

All these indicate the reliability of the strengthening training of basic Wushu skills in the experiment. Secondly, the choice of jumping difficulty and the stability of difficulty is not enough The experiment deliberately strengthened the training requirements of difficulty, and increased the stability of difficulty (Xu, 2017) and proposed that the difficulty of Wushu sets of athletes affects the scores of rehearsal level, mainly because of the unreasonable pause time before and after the completion of the



difficulty movement, resulting in the rhythm of the set is not clear, the difficulty of the movement paragraphs are not distributed in a balanced manner resulting in the layout of the arrangement of the layout of the unreasonable, the difficulty level is not high, exposing the athletes' difficulty level, the third paragraph of the paragraph is significantly correlated with the final scores of the rehearsal level. The reason is that the rhythm of the routine is not clear due to the unreasonable pause time before and after the difficult movement, the layout is not reasonable due to the unbalanced distribution of the difficult movement segments, the athletes' competitive level is low due to the low level of the difficult movement, and the style is not outstanding due to the single type of difficult movement. This is consistent with the problems and requirements of this paper.

Recommendation

This study is recommended for improving the set choreography thinking and set basic training of advanced students in Wushu schools, improving the training system and enhancing the professionalism of Wushu schools by focusing on the following requirements.

1. The choreography of Wushu sets of Daoshu should focus on the wholeness of the set, balancing practicality and performativity, at the same time, the content should have the integrity of the set, and the rules should be used flexibly to strengthen the innovation and emotional expression in the choreography.

2. Increase the diversity of movement content in the rules, and add quantitative evaluation indicators, reduce subjective judgement and fully explore the technical style of Wushu Daoshu.

3. The choreography of Wushu set Daoshu art should focus on the significance of the action of the actual combat. As a popular project of Wushu, the choreography of Wushu Daoshu should be in line with the significance of Wushu, using a variety of techniques to show its combat.

References

- Chen, H. (2013) Wushu competition rules and women's self-selected dojutsu routines choreography-analysis of data based on the 9th Universiade Wushu Competition in Guangdong Province. *Journal of Jiaying College*, 35(8), 87-91.
- Chen, S. (2022) Analysis of the current status of women's stick choreography in the 14th National Games. *Liaoning Sports Science and Technology*, 44(2), 103-107.
- Han, Y. (2005). Analysis of the arrangement and selection of difficult movements for men's spear skills in the 2004 National Wushu Championships. *Shandong Sports Science Technology*, 1, 4-6.
- He, M. (2013). Research on the characteristics of sports dance choreography for some middle-aged and elderly people in Beijing. Master's degree Thesis: Beijing Sport University.
- Huang, J. (2005). Research on the theory and application model of complete sets of competitive artistic gymnastics movements. Master's degree thesis: Beijing Sport University.
- Li, H. (2023). A study on the effect of self-selected long fist routine choreography on the scores of Chinese Wushu routine rehearsal level. Liaoning Normal University, 2023.
- Liu, J. (2009). Research on the arrangement theory of Changquan self-selected routines. *Fighting (Martial Arts Science)*, 6(9), 29-31.
- Liu, T. (2009). Application of "Golden Section Law" in Wushu Routine Arrangement. *China Sports Science and Technology*, 45(4), 91-93.
- Chinese Wushu Association (2020). *Taoist competition sets*. People's Sports Press, 1989.
- Xu, C. (2011). Research on elements of choreography for technical cheerleading. *Journal of Capital Medical University (Social Science Edition)*, 1, 291-293.



- Xu, J. (2017) A study on the effect of set difficulty choreography on the rehearsal level score of Wushu athletes in Hunan universities. Jishou University
- Zhang, M. (2006). A brief introduction to the arrangement of martial arts routines. *Fighting (Martial Arts Science)*, 1, 49-50.
- Zhang, Q. (2012). The development status and training countermeasures of the self-selected stick method in China's Wushu routines. Beijing Sports University,
- Zhao, N. (2013). Research on the theory of complete sets of broadcast gymnastics movements in my country. Beijing Sport University.

