THE EFFECTIVENESS OF THE MODEL OF "COMBINING WUSHU MORALITY, SKILL, INTEREST AND PHYSICAL FITNESS" IN WUSHU TEACHING IN PRIMARY SCHOOLS

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Abstract

The purpose of this study is to evaluate the effectiveness of the wushu teaching model of "combining wushu morality, skill, interest, and physical fitness" in primary education. In this study, a randomized controlled experimental design was used, which selects 100 fourth-grade students from a primary school in Hebei, China, and randomly divides them into an experimental group and a control group, with 50 students in each group. The experimental group adopted the teaching model of "combining wushu morality, skill, interest and physical fitness", while the control group adopted the traditional teaching model of "basic skills + routines". The teaching experiment lasted for 12 weeks, twice a week, 40 minutes each time. The results of the experiment showed that the scores of the students in the experimental group were significantly higher than those of the control group in the aspects of wushu morality, fighting skills, learning interest and physical fitness (P<0.05). The specific manifestations are as follows: the experimental group's scores in the aspects of wushu morality, such as respect for others, fair play and teamwork, were significantly improved; the progress in boxing, footwork and kicking skills was significantly better than that of the control group; the students' interest in learning was significantly enhanced in the aspects of novelty perception, challenge perception, attention and exploration; and the students' indicators in the aspects of physical qualities, such as strength, endurance, speed and coordination, were significantly better than those of the control group. The teaching model of "combining wushu morality, skill, interest, and physical fitness" has shown remarkable results in primary school wushu education, which not only improves the students' wushu morality and fighting skills, but also significantly stimulates the students' learning

The effectiveness of the model of "combining wushu morality, skill, interest and physical fitness" in wushu teaching in primary schools

interest and physical fitness quality.

Keywords: Wushu Teaching Model, "Combining Wushu Morality, Skill, Interest and Physical Fitness", Wushu Teaching in Primary Schools

INTRODUCTION

In traditional Chinese culture, wushu is not only a sport, but also an important carrier of cultural heritage and moral education. With the development of the modern education system, wushu education at the primary school level is particularly important, as it plays multiple roles in developing students' physical fitness, educating morals, and passing on culture. However, according to a recent report by the Ministry of Education, although more than 85 per cent of primary schools offer wushu classes, less than half of the students actually participate consistently and show strong interest (Lafuente, 2021). What this phenomenon reflects is the deep-seated problems that exist in current wushu education. Survey data shows that the teaching of wushu in most schools remains at the level of imparting basic skills, ignoring the potential of wushu as a tool for cultural and moral education (Bowman, 2019). Data from a survey involving primary school students' scores on wushu morality similarly showed that less than 30 per cent of primary school students were able to understand what wushu morality stood for, suggesting that the moral concepts of wushu education had not penetrated deeply into the primary school student population (Wu & Qu, 2021).

China's education takes "cultivating morality and cultivating people" as the fundamental task of education, under this background, people demand that wushu teaching return to its essential attributes (Chai Guangxin, 2021). A study shows that wushu teaching in the stage of compulsory education in China is still generally in the status quo of "practice" but not "fight", "emphasis on skills over morals" and "declining interest" (Wang Wenli, 2021). As an excellent traditional sports event in China, wushu is of great significance to train young people to bear hardships and stand hard work and establish correct values (Zhu Jinming, 2021). In particular, wushu should be introduced into the classroom of primary school students, the construction of wushu teachers should be improved, the teaching mode of wushu in primary schools should be reformed, and wushu should be better inherited and carried forward (Zheng Xue, 2021).

"Combining wushu morality, skill, interest, and physical fitness" refers to a teaching model that enhances students' moral sense and promotes their physical and mental development by improving their wushu morality, fighting skills, learning interest, and physical fitness. This study thoroughly analyses the actual effects of the teaching model of "combining wushu morality, skill, interest, and physical fitness" in primary school wushu education, clarifying its role in enhancing students' wushu morality, fighting skills, learning interest, and physical fitness. The aim is to realise the comprehensive development of wushu education in primary schools, and hopefully it will be of great significance to the current educational model of wushu education in primary schools.

METHODOLOGY

Research Subjects

In this study, a randomized controlled experimental design was used to evaluate the effectiveness of the teaching model of "combining wushu morality, skill, interest, and physical fitness". One hundred fourth-grade students from a primary school in Hebei Province were chosen as the research subjects, who were randomly divided into an experimental group and a control group, with 50 students in each group. The experimental group adopted the teaching model of "combining wushu morality, skill, interest and physical fitness", while the control group adopted the traditional teaching model of "basic skills + routines". The teaching experiment lasted for 12 weeks (from February 2024 to June 2024), twice a week, 40 minutes each time.

The inclusion criteria includes: (i) students in the fourth grade of primary school, aged between 9 and 11; (ii) in good health, with no serious illnesses or movement disorders; (iii) willing to participate in the study and with the consent of their parents or guardians.

The exclusion criteria includes: (i) students who have received systematic wushu training; (ii) having diseases or disabilities that affect sports or learning; (iii) unwilling to participate in the study or unable to complete the whole process of the study.

Research Design

The teaching content of the experimental group includes: cultivating students' moral qualities through historical stories, quotes about wushu morality, and traditional etiquette; systematically teaching basic boxing, footwork and kicking; setting up interesting course contents and diversified teaching methods to stimulate students' learning interests; and improving students' strength, endurance, speed and coordination through special physical training.

The teaching content of the control group includes: repeating the practice of basic boxing, footwork and kicking, with emphasis on the standardization of movements. Indicators of the basic training includes standardization and normality of movements; teaching traditional wushu routines with repeated drills, focusing on the coherence and beauty of the movements.

Observation Indicators

Indicators of wushu morality education includes respect for others, fair play and teamwork; indicators of fighting skills includes boxing skills, footwork skills and kicking skills; indicators of interest stimulation includes novelty perception, challenge perception, attention and exploration; and indicators of physical fitness includes strength (number of push-ups and sit-ups), endurance (time to complete an 800-metre run), speed (time to complete a 50-metre sprint) and coordination (time to complete an obstacle race).

Statistical Analysis

The software SPSS Statistics 26.0 was used for data processing in this study. Measurement information was expressed as mean \pm standard deviation, and independent samples t-test was used for

The effectiveness of the model of "combining wushu morality, skill, interest and physical fitness" in wushu teaching in primary schools

between-group comparisons; in all statistical analyses, P<0.05 indicated that the difference was statistically significant.

RESULTS

Baseline Information

Before the study began, baseline data of students in the experimental and control groups were measured and recorded. There were no significant differences (P>0.05) between the two groups of students in terms of basic characteristics such as age, gender, weight and height, indicating consistency between the two groups at the baseline level and ensuring the reliability of the subsequent analyses.

Table 1. Comparison of Baseline Information of Students in the Experimental and Control Groups

Item	Experimental Group (n=50)	Control Group (n=50)	P
Age (years old)	10.2 ± 0.5 years old	10.3 ± 0.4 years old	0.34
Number of Male Students	26	25	0.78
Number of Female Students	24	25	0.89
Weight (kg)	$32.8 \pm 4.3 \text{ kg}$	$32.5 \pm 4.2 \text{ kg}$	0.67
Height (cm)	140.3 ± 5.6 cm	139.7 ± 5.8 cm	0.59

Wushu Morality

Before the experiment, there was no significant difference between the baseline scores of the two groups of students in terms of wushu morality (P>0.05). At the end of the experiment, the experimental group scored significantly higher than the control group in wushu morality. The post-experiment test data showed that the experimental group students' scores in respect for others, fair play and teamwork were significantly higher (P<0.05). The specific results are as follows:

Table 2. Comparison of Wushu Morality Scores of Students in the Experimental and Control Groups

Indicators of Wushu Morality	Experimental Group (pre-test)	Experimental Group (post-test)	Control Group (pre-test)	Control Group (post-test)	P
Respect for Others	6.45 ± 1.22	8.43 ± 0.95	6.40 ± 1.15	7.10 ± 1.13	<0.01
Fair Play	6.18 ± 1.12	8.22 ± 1.08	6.20 ± 1.10	7.05 ± 1.16	< 0.01
Teamwork	6.32 ± 1.08	8.35 ± 1.07	6.30 ± 1.12	6.98 ± 1.18	< 0.01

Fighting Skills

Before the experiment, there was no significant difference between the baseline scores of the two groups of students in terms of fighting skills (P>0.05). At the end of the experiment, the experimental group improved significantly better than the control group in terms of fighting skills. The post-experiment test data showed that the students in the experimental group showed significant improvement in the scores of boxing, footwork and kicking skills (P<0.05). The specific results are as follows:

Table 3. Comparison of Fighting Skill Scores of Students in the Experimental and Control Groups

Indicators of Fighting Skills	Experimental Group (pre-test)	Experimental Group (post-test)	Control Group (pre-test)	Control Group (post-test)	P
Boxing Skills	5.43 ± 1.18	8.48 ± 0.92	5.50 ± 1.13	6.78 ± 0.87	< 0.01
Footwork Skills	5.25 ± 1.02	7.20 ± 0.67	5.22 ± 1.08	5.53 ± 0.63	< 0.01
Kicking Skills	5.87 ± 0.88	7.91 ± 0.79	5.89 ± 0.92	6.37 ± 0.72	< 0.01

Learning Interest

Before the experiment, there was no significant difference between the baseline scores of the two groups of students in terms of learning interest (P>0.05). At the end of the experiment, the experimental group showed significant enhancement in novelty perception, challenge perception, attention and exploration (P<0.05). The specific results are as follows:

The effectiveness of the model of "combining wushu morality, skill, interest and physical fitness" in wushu teaching in primary schools

Table 4. Comparison of Learning Interest Scores of Students in the Experimental and Control Groups

Indicators of Learning Interest	Experimental Group (pre-test)	Experimental Group (post-test)	Control Group (pre-test)	Control Group (post-test)	P
Novelty Perception	15.47 ± 1.82	18.63 ± 1.43	15.50 ± 1.84	17.52 ± 1.61	<0.01
Challenge Perception	14.05 ± 1.78	16.12 ± 1.87	14.07 ± 1.83	15.48 ± 1.91	< 0.05
Attention	15.52 ± 1.72	17.53 ± 1.56	15.47 ± 1.76	16.73 ± 1.62	< 0.05
Exploration	15.83 ± 1.62	17.82 ± 1.52	15.78 ± 1.64	16.78 ± 1.57	< 0.05

Physical Fitness

Before the experiment, there was no significant difference between the baseline scores of the two groups of students in terms of physical fitness (P>0.05). At the end of the experiment, the students in the experimental group had significantly better scores than the control group in all indicators of physical fitness (P<0.05). The specific results are as follows:

Table 5. Comparison of Physical Fitness Scores of Students in the Experimental and Control Groups

Indicators of Physical Fitness	Experimental Group (pre-test)	Experimental Group (post-test)	Control Group (pre-test)	Control Group (post-test)	P
Strength (push-ups)	12.3 ± 3.1	20.4 ± 3.6	12.0 ± 3.3	16.1 ± 2.5	<0.01
Endurance (800-metre run)	$4:02 \pm 0:21$	3:18 ± 0:16	4:06 ± 0:26	$3:49 \pm 0:21$	<0.01
Speed (50-metre sprint)	$9.4 \pm 0.7 \text{ s}$	$8.3\pm0.6~\text{s}$	$9.5 \pm 0.8 \text{ s}$	$9.1 \pm 0.7 \text{ s}$	<0.01
Coordination (obstacle race)	$18.6 \pm 2.1 \text{ s}$	$15.4 \pm 1.9 \text{ s}$	$18.7 \pm 2.2 \text{ s}$	$18.1 \pm 2.3 \text{ s}$	< 0.01

DISCUSSIONS

In the modern education system, wushu education is not only a part of physical training, but also an important tool for cultural inheritance and moral cultivation (Rassovsky, 2019). However, current primary school wushu education is still deficient in many aspects, especially in how to effectively integrate skill training and moral education (Liu Wenwu, 2020). Against this background, the teaching

model of "combining wushu morality, skill, interest, and physical fitness" was proposed with the aim of enhancing the overall effectiveness of primary school wushu education by integrating the development of students' wushu morality, skills, learning interest, and physical fitness (Muhajir, 2022). In this study, a randomized controlled experimental design was used to evaluate the effectiveness of the teaching model of "combining wushu morality, skill, interest, and physical fitness", focusing on its effects on students' moral qualities, fighting skills, learning interests and physical fitness. The results of the study showed that the teaching model has significant advantages in many aspects.

The results of the experiment on wushu morality showed that students in the experimental group scored significantly higher than those in the control group in respect for others, fair play and teamwork (P<0.05). This showed that the teaching model of "combining wushu morality, skill, interest, and physical fitness" effectively integrated wushu moral education into primary school teaching through the introduction of historical stories and quotes about wushu morality. In contrast, the traditional teaching model focuses on skill training and neglects the cultivation of wushu morality. The significant improvement of the experimental group's students in wushu morality verified the effectiveness of this teaching model.

The results of the study on fighting ability showed that the experimental group's primary school students scored significantly higher than the control group's primary school students in boxing, footwork, and kicking skills (P<0.01). This showed that the teaching model of "combining wushu morality, skill, interest, and physical fitness" enabled the teachers to systematically teach basic boxing, footwork and kicking, improving the students' practical combat ability through sparring and real combat simulation. While the traditional teaching model also focuses on the training of basic skills, it often lacks systematicity and relevance, leading to insufficient application ability of students in actual confrontation (Li Xu, 2023). The significant progress of the students in the experimental group in terms of fighting skills indicated that the teaching model can better cultivate the students' practical combat ability

The students in the experimental group showed a significant enhancement in their learning interest (P<0.05). This showed that the teaching model of "combining wushu morality, skill, interest, and physical fitness" effectively stimulated the students' learning interest by setting interesting course content and using diversified teaching methods. In contrast, the traditional wushu teaching model is often too single and lacks innovation and interest, leading to low learning interest among students (Ireneusz, 2022). The significant increase in the learning interest of the students in the experimental group proved that the introduction of novel and diversified contents in teaching is an effective way to stimulate the interest of students.

In addition, the students in the experimental group were significantly better than the control group in the indicators of physical fitness such as strength, endurance, speed, and coordination (P<0.01). This result showed that the teaching model of "combining wushu morality, skill, interest, and physical fitness" significantly improved the students' physical fitness through specialized physical fitness training. In contrast, the traditional teaching model lacks systematicity and pertinence in physical training, which makes it difficult to comprehensively improve students' physical fitness quality (Weiwu, 2022). The significant progress in physical fitness of the students in the experimental group proved the effectiveness of the teaching model in physical fitness training."When young people are strong, China is strong", wushuplays an important role in implementing the national strategy of national fitness and plays an important role in promoting the construction of healthy China (Dai Huan, 2021). Cultivating students' interest in practicing wushu in primary school is one of the important and

effective ways to enhance the practice of wushu in the whole people (Li Gang, 2019). Through the teaching mode of "combining wushu morality, skill, interest, and physical fitness", students' learning interest can be well promoted, and students can effectively and completely experience the essence of wushu (Cai Chaoxiang, 2019). As primary school students who are about to enter youth, they should continue to learn and cultivate in physical and mental health, ideological ethics and value pursuit, which will directly affect the future destiny of the country (Bai Xuehui, 2018).

In summary, this study verified the effectiveness of the teaching model of "combining wushu morality, skill, interest, and physical fitness" in primary school wushu education through empirical data, and provided a scientific basis for the reform of primary school wushu education. By combining moral education and skill training, this teaching model effectively improved the students' wushu morality and fighting skills, and stimulated the students' learning interest and enhanced their learning motivation through the setting of interesting course content and diversified teaching methods. Finally, through specialized physical training, the students' physical fitness was comprehensively improved.

CONCLUSIONS

The wushu teaching model of "combining wushu morality, skill, interest, and physical fitness" significantly improved the students' wushu morality in terms of respect for others, fair play and teamwork; the teaching model significantly improved the students' fighting skills and combat ability through the systematic teaching of basic boxing, footwork and kicking; the students' learning interest and motivation were effectively stimulated through the setting of interesting course content and diversified teaching methods; in addition, the specialized physical training significantly improved the students' physical fitness in terms of strength, endurance, speed and coordination. According to the research data of this study, the teaching model of "combining wushu morality, skill, interest, and physical fitness" has shown significant effects in primary school wushu education, which is of great significance to the reform of wushu education and the inheritance of traditional culture.

REFERENCES

Bowman, P. (2019). Making martial arts history matter. In Martial Arts in Asia (pp. 35-53). Routledge.

- Bai, X. (2018). Creation and empirical research of "Kung Fu Panda" exercises [Master dissertation, Shanghai University of Sport].
- Chai, G. (2021). Theoretical construction and empirical research on the "integration of combat and practice" teaching model in compulsory education Wushu [Doctoral dissertation, East China Normal University]. https://doi.org/10.27149/d.cnki.ghdsu.2021.002566
- Cai, C. (2019). Curriculum design and empirical research of Wing Chun in primary schools [Master dissertation, Shanghai University of Sport]. https://doi.org/10.27315/d.cnki.gstyx.2019.000057
- Dai, H. (2020). Empirical research on the application of micro-lectures in primary school Wushu teaching [Master dissertation, Wuhan Sports University]. https://doi.org/10.27384/d.cnki.gwhtc.2020.000362
- Ireneusz, C., & Igor, C. (2022). Relationships between physical fitness and wrestling-specific fitness in freestyle wrestlers. *Polish Journal of Sport and Tourism*, 29(4), 15-20.

- Lafuente, J. C., Zubiaur, M., & Gutiérrez-García, C. (2021). Effects of martial arts and combat sports training on anger and aggression: A systematic review. *Aggression and Violent Behavior*, 58, 101611.
- Li, X. (2023). Analysis on the application effect of continuous equal length contraction in Wushu special sensitive quality teaching. *Chinese Martial Arts*, (04), 113-115.
- Liu, W. (2020). Promote the reform of Wushu education system through the reform of Wushu professional and technical education. *Sports Science*, 40(12), 83-93.
- Li, G. (2019). Research on the application of "game" teaching method in "Level One" Wushu teaching [Master dissertation, Jiangxi Science & Technology Normal University]. https://doi.org/10.27751/d.cnki.gjxkj.2019.000177
- Muhajir, A. (2022). Inclusion of pluralism character education in the Islamic modern boarding schools during the pandemic era. *Journal of Social Studies Education Research*, 13(2), 196-220.
- Rassovsky, Y., Harwood, A., Zagoory-Sharon, O., et al. (2019). Martial arts increase oxytocin production. *Scientific Reports*, 9(1), 12980.
- Weiwu, Y., Shihong, L., Shuaibing, L., et al. (2022). Application of artificial intelligence technology in martial arts education governance. *Discrete Dynamics in Nature and Society*.
- Wu, Q., & Qu, G. (2021). —— Take the Sanda course in Jimo District of Qingdao as an example. In Summary of papers of 2021 National Wushu Education and Health Conference and Ethnic Traditional Sports Education on Campus Seminar (II).
- Wang, W. (2021). Empirical research on improving the effectiveness of Wushu teaching in primary schools based on the perspective of "flipped classroom" [Master dissertation, East China Jiaotong University]. https://doi.org/10.27147/d.cnki.ghdju.2021.000424
- Zhu, J. (2021). Research on the teaching practice of Songxi Neijiaquan in primary schools based on the Chinese health physical education curriculum model [Master dissertation, China West Normal University]. https://doi.org/10.27859/d.cnki.gxhsf.2021.000329
- Zheng, X. (2021). Practical review and promotion strategies for the development of Wushu in primary schools in Hongshan District, Wuhan, under the background of "integration of sports and education" [Master dissertation, Wuhan Sports University]. https://doi.org/10.27384/d.cnki.gwhtc.2021.000038