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A comparative study of martial arts textbook experiments in primary and secondary schools

¹Ju Hanyu, ²Jang yunchang*

¹Dept. of Sports science, Kyonggi University, Korea ²Dept. of Sports science, Kyonggi University, Korea 82960818@naver.com

Abstract

In order to explore the characteristics that are more suitable for the physical and mental development of young people, enrich the existing martial arts teaching material system. Through the literature method, experimental method, questionnaire method and other research methods, the teaching comparison experiment of martial arts textbooks in primary and secondary schools was carried out, and the attitudes of martial arts courses at different ages in primary and secondary schools were analyzed. For different types of martial arts teaching materials, primary school students are more fond of them than junior high school students, and students of different ages also have different degrees of love for the four types of martial arts teaching materials, pointing out that it is necessary to carry out the reform of martial arts teaching materials as soon as possible, improve the difficulty, teach martial arts skills and knowledge in the combination of attack and defense, and reduce the trend of gymnastics; adjust and improve the periodicity, pertinence and diversity of martial arts teaching materials; mobilize students' enthusiasm for learning, cultivate students' interest in martial arts, and promote the inheritance of martial arts. In the process of martial arts teaching, students' sense of identification with traditional Chinese culture is enhanced, and cultural self-confidence is enhanced.

Keywords: Primary and Secondary Schools, Martial Arts Textbooks, Experimental Comparison

1. INTRODUCTION

As a sports activity born and bred in China, Wushu is supported by rich theories. It has various sports forms and distinctive features. As one of school sports, martial arts has the irreplaceable particularity of other sports. It can not only force students' physique and hone their will, but also contribute to the dissemination of traditional East Asian tradition culture and enhance national self-esteem and cultural self-confidence. In the 1960s and 1960s, Wushu entered primary and secondary schools in my country as a physical education course, and gradually formed a teaching material system with basic skills, Changquan-like routines, dueling routines and later added dan-level routines as the main content [1]. This teaching material system has a good reflection in the laws and characteristics of the martial arts movement, and further actively promotes the promotion and dissemination of martial arts. But things are constantly in motion and development, and have two sides. With the passage of time, the current martial arts teaching material system can not meet the requirements of the

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Corresponding Author: <u>82960818@naver.com</u> Tel: +82-31-273-3054, Fax: +82-508-930-3057

Doctor, Dept. of Sports sicience, Kyonggi Univ., Korea

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changing times, and many problems need to be improved and solved urgently [2]. Under this background, it is imperative to carry out experimental comparative research on teaching materials for primary and secondary schools, and to explore a martial arts teaching material system that conforms to the new concept of contemporary physical education curriculum reform and is more suitable for the physical and mental development of primary and secondary school students

2. RESEARCH OBJECTS AND RESEARCH METHODS

2.1 Research Objects

Taking the experimental comparison of four types of martial arts teaching materials as the research object. 400 primary and middle school students (220 primary school students and 180 middle school students) from 4 classes (8 classes) with similar physical education levels were randomly selected from each of the two schools in Zhengzhou as the subjects of this experiment.

2.2 Research methods

2.2.1 Documentary method

Using "wushu teaching materials" and "teaching materials experiments" as keywords, searched on CNKI, Wanfang Database, and the official website of the State General Administration of Sports, etc., and consulted relevant literature and materials on Wushu in primary and secondary schools, to lay a theoretical foundation for this research.

2.2.2 Experimental method

For primary school age and middle school age, four types of textbooks of different nature were used, and 32 hours of experimental teaching were compared (Table 1). Kickboxing in primary schools, dan-level routines in primary and secondary schools, juvenile boxing in primary schools and primary boxing in middle schools (new curriculum standard experimental materials). Among them, the self-edited teaching materials are martial arts and boxing exercises, and the state stipulates that the routines are dan-level routines, juvenile boxing, and juvenile junior long boxing.

Sample Grade **Textbook** Size Elementary School Elementary Elementary Kickboxing Juvenile Boxing 220 Wushu Exercise School Duan School (new edition) (traditional textbook) Routine (new edition) **Elementary Boxing** Junior High School Junior High Junior High Kickboxing 180 Martial Arts Exercise School Dan-(Course Standard School (New Edition) (New Edition) Ranking Routine Textbook)

Table 1. Table of research objects

2.2.3 Questionnaire survey method

According to the purpose and content of this research, combined with a large number of relevant materials, a four-dimensional "Martial Arts Learning Attitude" questionnaire was designed, including intention, emotion, cognition and class experience, and was distributed and collected. A total of 400 questionnaires were distributed in the experiment, 390 were recovered, 37 unqualified questionnaires were excluded, and 353 were valid questionnaires, with an effective rate of 90.5% (see Figure 2). The questionnaire was calculated by SPSS24.0 software, the reliability of the questionnaire was 0.9328, and the questionnaire had high accuracy.

Table 2. Statistics of the basic situation of the sample

Quantity issued	Quantity ollected	Recycling rate	Effective uantity	Effective rate
400	390	97.5%	353	90.5%

2.2.4 Mathematical Statistics

Using Excel2007 and SPSS23.0 to analyze the obtained data, quantify the learning attitudes of primary and secondary school students in the four types of martial arts textbooks, and provide accurate data support for the research results.

2.2.5 Logical Analysis

Through induction, reasoning and other methods, the obtained data and data are logically analyzed, and the connotation of the phenomenon is explored, so as to obtain the comprehensive research results.

3. Results and Analysis

3.1 Comparative analysis of primary and secondary school students' martial arts learning attitudes in similar martial arts textbooks

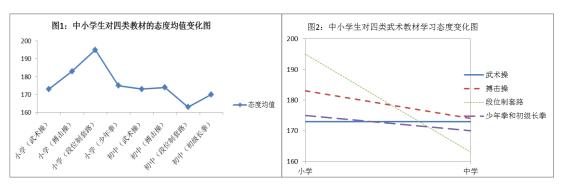


Figure 1 Figure 2

In this study, four types of martial arts textbooks were compared in classroom teaching experiments. The first type of textbooks was martial arts exercises in primary and secondary schools, the second type was martial arts in primary and secondary schools, the third type was dan-level routines in primary and secondary schools, and the fourth type was juvenile boxing in primary and secondary schools. and junior high school boxing. Through the comparative analysis of students' learning attitudes (Figure 1 and Figure 2), it can be concluded that the changes in students' attitudes in the four types of martial arts teaching are inversely proportional to their age growth [3]. By analyzing the mean values of attitudes, the dan rank system has the highest attitude

score among primary school students, and the Changquan routine is in the Highest score among junior high school students. In general, primary school students are more fond of martial arts than middle school students.

Table 3. T-test of independent samples of students' learning attitudes in four types of martial arts textbooks in primary and secondary schools

Four types of textbooks	Class type	Mean	Standard deviation	t	Significance level
Martial arts training materials	*1 (42) 2 (49)	173.64 173.60	36.41 20.63	.005	.996
Kickboxing textbook	1 (42) 2 (48)	184.07 176.67	28.23 31.74	1.1399	.258
Duan system	1 (46) 2 (42)	195.09 164.39	39.38 32.93	3.687***	.000
Junior Fist and Junior Long Fist	1 (44) 2 (40)	179.13 171.30	38.10 25.09	1.035	.305

^{*1.} Elementary School; 2. Junior High School

In the independent sample t-test on the related data of similar teaching materials (see Table 3), it is found that the t-value of the dan-level routine teaching materials is 3.687***, and the P-value is less than 0.001, which has a significant difference, indicating the degree of love for the dan-level routines. There are obvious differences between the primary school age and the middle school age, and the primary school students are higher than the middle school students. Excluding the routines of the rank system, the other three types of martial arts teaching materials did not show any differences. The fact that there is no significant difference shows that: on the one hand, there are obvious differences in the attitudes of primary and secondary school students at different school ages towards similar martial arts textbooks, so schools should take this influencing factor into consideration when arranging and selecting martial arts textbooks; The interest of primary school students in learning martial arts has a downward trend, which requires that school martial arts textbooks and teaching methods should be reformed as soon as possible in the teaching mode, teaching method, and teaching content, so as to improve the enthusiasm and love of students to learn martial arts, which is also conducive to martial arts in school sports and even the whole world. Orientation promotion and popularization.

Table 4. One-way ANOVA of learning attitudes of four types of Wushu textbooks in primary schools

	Comparison of four types of textbooks in primary school	Mean	Standard deviation	F	Significance level
Attitude	Martial Arts Exercise (42)	173.64*	36.41	2.699*	.048
	Kickboxing (42)	184.07	28.23		
	Duan system routine (46)	195.09*	39.38		
	Junior Boxing (44)	179.13*	38.10		

3.2 Experimental comparative analysis of primary and secondary school students' martial arts learning attitudes with different types of martial arts textbooks

3.2.1 Experimental comparative analysis of primary school students' martial arts learning attitudes with different martial arts textbooks

The comparative analysis of the four types of textbooks in primary school (see Table 4) shows that there are significant differences between the third type of martial arts textbooks and the second type of martial arts textbooks, and there are also significant differences with the fourth type of martial arts textbooks. It can be seen that the most popular among primary school students is the third type of martial arts teaching materials (duan-level routines). However, the standard deviation of the third type of Wushu textbook (Duanwei system) is 39.38, and the degree of dispersion is higher than that of the other three types of Wushu textbooks, indicating that there are differences among students in the attitude of the Duanwei system. The second place in the mean value of attitude is Wushu Fighting Exercise, with a standard deviation of 28.23. The standard deviation of the four types of Wushu textbooks is the lowest, indicating that there is no difference in the attitudes of primary school students towards Wushu Fighting Exercise, and the attitudes are consistent. It is the second most popular among primary school students. This phenomenon occurs. On the one hand, the level of difficulty of the routines in the dan rank system is moderate, and the sports style and characteristics of martial arts are clearly reflected. Primary school students are curious, active, and love games. Kickboxing has obvious offensive and defensive characteristics, and accompanied by intense music, it can well arouse students' enthusiasm for learning; Boxing has high requirements on the flexibility and coordination of students' bodies. There are many movements, which are more difficult and difficult to learn. Wushu movements are developing towards gymnastics. The characteristics of martial arts are not reflected much, and they are simple and boring. Therefore, juvenile boxing and martial arts exercises are not highly favored by students, and their enthusiasm is not high, and it is not easy to cultivate students' interest in learning martial arts.

Table 5. A comparative study of martial arts textbook experiments in primary and secondary schools

	中学四类教材比较	Mean	Standard deviation	F	Significance level
Attitude	Martial Arts Exercise (49)	173.60	20.63	1.415	.240
	Kickboxing (48)	176.67	31.74		
	Duan system routine (42)	164.39	32.93		
	Junior Boxing (40)	171.38	25.09		

3.2.2 Comparative analysis of middle school students' martial arts learning attitudes in different martial arts textbooks

Through the comparative analysis of the four types of martial arts textbooks in middle school, there is no significant difference between the four types of martial arts textbooks, which shows that the four types of martial arts textbooks are not highly popular among students, and further shows that the four types of martial arts textbooks are not particularly popular with students. From the average value, it can be seen that boxing exercise is the highest, and the rank system routine is the lowest, which is opposite to the average result of the primary school stage. To explore the reason, on the one hand, from the age of primary school students to

middle school students, intelligence and psychology will also increase with the growth. Changes, and middle school students are facing the pressure of middle school sports exams, martial arts does not belong to the category of sports additional exams, and the distracted energy will be reduced accordingly.

4. COUNTERMEASURES

4.1 Adjust and improve the stages of Wushu teaching materials, improve pertinence, and increase diversity

The study found that students of different school ages have different degrees of liking for martial arts. For example, the most favorite dan rank routine in elementary school becomes the least favorite in middle school. Therefore, martial arts textbooks can be made according to the different stages of school age. Adjustment. According to interviews and investigations, it is found that the teaching content of many primary and middle school Wushu courses is still the traditional Wushu routines (primary Changquan, Juvenile Quan) compiled in the 1950s and 1960s, and these teaching materials are more or less consistent with today's teaching content and requirements. It doesn't match, it looks monotonous and boring. Although many new martial arts textbooks have been added in recent years, they cannot fully and concretely reflect the profound and ever-changing technical characteristics of martial arts culture. Therefore, martial arts textbooks for primary and secondary schools should adjust and improve the stage and pertinence of martial arts textbooks. , Increase diversity, so that Wushu teachers and students have more options in the rich and perfect Wushu teaching material system.

4.2 Increase the teaching proportion of the combination of attack and defense in Wushu teaching, and reduce the trend of gymnastics

Fighting is the most essential feature of martial arts. In the practice of hitting targets, 236 elementary and middle school students felt particularly good, 243 elementary and middle school students learned a lot of the offensive and defensive meanings of martial arts through target shooting, and 322 elementary and middle school students hoped to learn some practical martial arts self-defense actions through martial arts training. A large amount of data fully reflects the students' love and attention to the practicality of martial arts combat. In the martial arts class, it can be seen from the students' performance of learning martial arts routines that in the process of learning the meaning of offense and defense and grasping movements, the students' attention and enthusiasm are significantly increased, the classroom atmosphere is also well mobilized, and the teaching efficiency is improved. The teaching atmosphere and effect of grappling action is opposite to the teaching of Wushu Gymnastics, while the martial arts movements of Wushu Cao lack offensive and defensive meanings, technical characteristics and styles, and the rhythm and movements are also more gymnastic. According to the above summary and analysis, the Wushu teaching material system should increase the teaching proportion of the combination of attack and defense in Wushu, and reduce the trend of gymnastics [4].

4.3 Help students develop interest in martial arts and promote better spread and inheritance of martial arts

One of the important purposes of school sports is to cultivate students' awareness and ability of lifelong sports. The formation of lifelong sports awareness and ability needs to be based on skilled technology and a love for sports itself. Martial arts is a gradual and progressive sport that requires a lot of time to cultivate and practice. Compared with other sports, the feeling of happiness lags behind. Traditional physical education teaching methods and teaching materials cannot mobilize the enthusiasm of students and experience the fun of

martial arts in a short period of time. Therefore, it can be combined with teaching methods such as games or multimedia to observe and practice martial arts attack and defense, mobilize students' enthusiasm for learning martial arts, cultivate their interest in martial arts, form a lifelong awareness and habit of martial arts, and promote the spread and inheritance of martial arts.

4.4 In the process of martial arts teaching, students can improve their sense of identity with our traditional culture and enhance their cultural self-confidence

The emergence and development of martial arts stems from the need for survival, and the struggle between territorial and population has always existed. This is the need for war, and finally the need for entertainment. With the progress and development of society, the functions of martial arts have also increased and changed accordingly. From the original combat function, the fitness function has been added, and the social stability has prompted the transformation of martial arts to the function of culture and entertainment [5]. In other words, the martial arts' combat ability is gradually weakened, but the foundation of fitness and culture is strengthened. Wushu culture, Wushu etiquette, respect for teachers and Tao should be added to the Wushu textbook system in primary and secondary schools, so that Wushu culture and even Chinese traditional culture are rooted in middle school Wushu teaching, so that students can be influenced by Chinese traditional culture invisibly, increase cultural identity.

5. CONCLUSION

5.1 Conclusion

It is found from the experimental research that, firstly, primary and secondary school students of different school age have different degrees of fondness for different martial arts textbooks. Duan-level routines are the most popular among primary school students, but at the middle school level, they become the most unpopular teaching materials for students, and students' preferences for the four types of martial arts teaching materials are also uneven. Second, it is concluded that the content of the four types of martial arts teaching materials lacks stage, pertinence, interest and richness, which is not conducive to the cultivation of students' interest in martial arts, the promotion of martial arts in primary and secondary schools, and the enhancement of cultural identity and self-confidence.

5.2 Recommendations

Combined with the research results and countermeasures, the research suggests that various martial arts textbooks should be adjusted and improved for each age stage, and the following specific suggestions are put forward:

- 1. Adjust and improve the stage, pertinence and diversity of Wushu teaching materials;
- 2. Increase the teaching proportion of the combination of attack and defense in Wushu teaching, and reduce the trend of gymnastics;
- 3. Help students cultivate students' interest in martial arts and promote the spread and inheritance of martial arts;
- 4. in the process of martial arts teaching, improve students' sense of identity with our traditional culture and enhance cultural self-confidence.

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