

TAKING TAIJIQUAN TEACHING MODEL IN PROCESS OF KNOWLEDGE TRANSFER

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Abstract

In order to solve the current problem of students' cognition of martial arts culture and their interest in learning, we design a set of transfer programs that closely integrate elements such as martial spirit, national beliefs and students' identity. We will use cultural identity to promote inheritance and innovation, and use martial arts moral identity to promote national heritage, forming a new ecological space for the inheritance and development of martial arts culture. This study uses literature, interview and logical analysis to design a martial arts transmission program for college students, and verifies the feasibility of the program through experimental teaching. The experiment was conducted with the students of the Taijiquan elective course of Changzhou Textile College, Year 2021 as the experimental subjects. A 16-week teaching experiment was conducted, in which Class A was the experimental class and Class D was the control class. The experimental data were statistically and analytically analyzed through mathematical and logical analysis methods, and conclusions were finally drawn. The results show that through experimental verification, the experimental class and the control class have significant differences in general, and it can be inferred that the program is feasible. Thus, the knowledge transfer can be optimized in a real sense. Better promote the development of Taijiquan and the use and transmission of scientific exercise methods for body cultivation.

Keywords: Taijiquan, transmission, knowledge transfer

Introduction

Taijiquan is one of the representatives of traditional sports culture in China and has many functions and values. Since its emergence, Taijiquan has gradually "blossomed" on the Chinese landscape, once spreading abroad, and still endures today with great significance. As a treasure of Chinese culture, Taijiquan has become a traditional sport with Chinese characteristics and a representative of Chinese cultural heritage, known in various countries, becoming another "window" for China to be understood by the world. Its formation and development are embedded in and reflect the ancient Chinese philosophical thought and social development, and are the inheritance of traditional multiculturalism.

Statement of the Research Problem

Scholars' studies on the knowledge structure of taijiquan have shown that the current knowledge structure in the teaching process of taijiquan has not yet been adapted to the needs of physical education reform, and the awareness, teaching, and practice of healthy lifestyles need to be guided in the teaching process. Then, the method and form diversification of the imparters are the key of knowledge transfer research. This paper takes university students as the research object and tries to explore the inner operation process, knowledge transfer levels and ways of knowledge transfer in taijiquan transmission by sorting out and deeply analyzing

the classical theories and models in knowledge transfer, and the research extends to how knowledge transfer occurs among individual teachers, students and students.

Research Questions

Therefore whether internal and external knowledge can be integrated and developed, effectively utilized and managed in a timely manner with maximum integration in Taijiquan transmission innovation will become the core issue to improve the efficiency and effectiveness of the process.

- 1、 What are the ways to increase interest in learning martial arts?
- 2、 How to study the transmission programs that adapt to the needs of physical education reform, knowledge recognition and high popularity.
- 3、 How to transfer the cultural connotation of Taijiquan skills for effective knowledge transfer?

The Research Objectives

1. A comprehensive discussion of ways and measures to optimize the effects of knowledge transfer. To design and develop a teaching program that can be circulated and promoted in the society and connotes traditional cultural ideas, to verify and improve the program through practice, and then to enhance the optimization of knowledge transfer in the teaching of taijiquan, and to provide a theoretical basis and practical reference for the popularization and promotion of taijiquan.

2.To verify the feasibility of the program through teaching experiments.

3.How to transfer taijiquan skills and cultural connotations for effective knowledge transfer?

Research Framework

Based on the "knowledge transfer" process model, this paper is divided into the following three steps: First, we analyze the elements of taijiquan teaching program design, including learners, teaching contents and teaching resources. The second step is to plan a specific teaching design based on the investigation and analysis of the teaching elements. The third step is to implement and analyze the instructional design program, and the above is the framework support of this thesis.

The Research Hypotheses

The specific hypotheses of this study are summarized as follows.

1. For lifelong fitness, theoretically this course explores ways, methods, and strategies for popularizing taijiquan education at the university level, summarizes experiences, and lays a solid foundation for further research on taijiquan teaching.

2. Effective knowledge transfer provides theoretical and practical support.

The Scope and Limitation of the Research

At the beginning of the development, in order to make a preliminary understanding and grasp of the school students' knowledge about Taijiquan, a sample survey was taken and an average of three hundred questionnaires were put to our school students, probably because

students were sampled from among the grades, and electronic questionnaires were distributed through WeChat class groups and WeChat scanning codes. The sample questionnaire recovery rate reached 98%, with a valid recovery of 86.5%. The experiment was also taught to four classes of students in the class of 2020.

The Benefits of the Research

The reasons that hinder knowledge transfer in the innovation process can be identified, analyzed and solved, and knowledge transfer can be successfully realized to improve the efficiency and effectiveness of the transfer of Taijiquan and other martial arts sports. Specifically

1、 Researching the knowledge transfer process of taijiquan transmission program in practice has important practical value and significance to improve the effect of taijiquan transmission, and this research has become one of the hot issues in the research of sports science today, and its has important research value.

2、 Provide theoretical basis and examples for the popularization and promotion of Taijiquan

Theory and Literature Reviews

Taijiquan

Taijiquan, an intangible cultural heritage, is a traditional Chinese boxing art that combines internal and external cultivation, softness, slowness, lightness, and flexibility with the dialectical concepts of yin and yang in traditional Chinese Confucianism and Taoism as the core idea, and integrates various functions such as nourishing the temperament, strengthening the body, and fighting against skill.

Knowledge transfer process model

Szulanski proposes the knowledge transfer process model and divides the knowledge transfer process from the source unit to the receiver unit into four stages: the initial stage (Initiation), which means that the source unit identifies the knowledge that can meet the requirements of the other side; the implementation stage (Implementation), which means that both sides establish a suitable channel for knowledge transfer.

Five-stage model of knowledge transfer process

Gilbert and Cordey-Hayes decomposed the knowledge transfer process into five stages: acquisition, communication, application, acceptance, and assimilation, and the model added the assimilation stage of the knowledge transfer process from the initial four stages through empirical research.

Taijiquan knowledge transfer process model

Based on the research results of Gilbert, Cordey-Hayes and Szulanski, the knowledge transfer of taijiquan is divided into four stages. (1) Knowledge acquisition. Knowledge transfer does not occur on its own, but must overcome external resistance. For students, knowledge acquisition must overcome their own inertia and requires motivation, such as being recognized and seeking a sense of respect, which are useful motivators for students to learn. In addition to

motivation, there must be sources of knowledge for students to learn, such as through training, expert lectures, etc., to provide students with the knowledge they need in education and training. (2) Effective communication. After establishing the transfer channel, the transferring parties need to make necessary adjustments to meet and adapt to students' knowledge needs, and make timely adjustments and repairs to the obstructive factors in knowledge transfer to ensure the continuity and smoothness of knowledge transfer. (3) Application screening. Students apply the transferred knowledge to physical exercise, popularization and training, select, arrange and reorganize the transferred knowledge, and integrate it with the original knowledge system. (4) Retention and internalization. The transferred knowledge cannot be absorbed in its entirety. After applying and verifying the transferred knowledge, students will discard some of the knowledge that is difficult to be absorbed and selectively store the part of knowledge that is integrated with the original knowledge system, and internalize the knowledge as part of their own knowledge system to achieve the purpose of adding value to knowledge.

Research related to Taijiquan and instructional design

(1) Related research on instructional design

Patricia L. Smith¹³ (2008) argues that one -expression that defines instructional design is to describe the process involved in systematically planning instruction. He suggests that there are three questions that instructional designers need to understand before designing instructional tasks, namely: 1. (How are we going to get there? (How will we know we have arrived? (assessment and evaluation). To address these three questions, the designer does these three things: 1. Conducts instructional analysis (to determine instructional goals) 2. Develops instructional strategies (to understand how to get there) 3. "Analysis-Strategy-Evaluation" defines the model of instructional design.

Research Methodology

Population/Sample Sizes

In this study, 105 students of Changzhou Textile College were taken as the research subjects for the teaching of Taijiquan. Taking the needs of cultivating the body, strengthening the body, passing on the excellent Chinese traditional culture and promoting the national spirit as the guide, the research methods such as literature method, logical analysis method, empirical research and questionnaire were used.

Analysis of questionnaire data

The researcher developed a predetermined questionnaire prediction for taijiquan exercise familiarity as well as learning interest, and analyzed the scale using SPSS 22.0, and completed a topic selection screening as a statistical basis for formal questionnaire determination. The specific formal questionnaire items were divided into 3 parts and the following 3 charts: the sample paper had a 98% return rate and a valid return of 86.5%, while the experimental teaching was conducted for 2 classes of students in the class of 2020.

Whether or not they had experience in practicing Taijiquan

Before the experiment, the experimental class (Class 1) and the control class (Class 3) were surveyed about their experience of martial arts practice, and were informed by questionnaires

as well as inquiries. One student in the experimental class 1 and one student in the control class 3 had previously studied martial arts, while all other students had not studied martial arts. Finally, in the statistical analysis of the data before and after the experiment, the experimental data of two students who had received martial arts study were excluded in order to ensure the homogeneity of the experimental subjects.

Experimental content

The experimental content of the transmission program of this study is divided into three main aspects: cultural awareness of taijiquan, technical content, and martial virtues and rituals.

Results of Data Analysis

Analysis table of the perception of taijiquan

Both the experimental class 1 and the control class 3 included cultural knowledge of martial arts concepts, content classification, functional roles, martial arts techniques, martial virtues and rituals, and martial arts culture and spirit. After 16 weeks of martial arts training, the experimental results and the analyzed cognitive aspects of the martial arts cultural training program should be significantly improved in both the experimental and control classes, from the students who had not received martial arts education. Thus, it is also evident from the experimental data that both the experimental and control classes underwent knowledge transfer in the cultural cognitive aspects of martial arts during the teaching experiment.

Table 1 Analysis of perceptions of taijiquan in experimental class 1 and control class 3 before and after the experiment (n=54)

Classes	Before Experiment	After Experiment	T	P
Experimental1 class1	11.95 ± 9.75	40.00 ± 14.49	-9.599	0.000**
Experimental2 class1	8.22 ± 10.05	29.38 ± 8.26	-7.196	0.000**

Note: Note: * represents significant difference P<0. 05; ** represents highly significant difference P<0. 01

After the experiment, independent samples t-tests were conducted on the scores of taijiquan cognition questionnaires of the first experimental group (experimental class 1 and control class 3), respectively. The taijiquan cognition of experimental class 1 was 46.95 ± 15.45, and the martial arts cognition of control class 3 was 29.42 ± 8.45, with a p-value of 0.000<0.01, a highly significant difference. The main reason for this is that the content of the training program mainly includes three aspects: taijiquan skills, taijiquan cultural awareness, and martial arts rituals. Among them, the experimental class 1 was devoted to long-term communication and learning of the three aspects of martial arts culture awareness. The control class 3, on the other hand, was taught through the traditional Taijiquan teaching in the traditional and single form of teacher lecture and student listening. Thus, the design and implementation of all aspects produced very significant results in improving the cognitive level of martial arts among college students.

Experimental results and analysis of learning interest Paired-samples t-tests were conducted on the scores of taijiquan learning interest scale before and after the experiment for experimental class 1 and control class 3, respectively. The interest in learning taijiquan before the experiment was 83.26 and 16.46 in class 1, and the interest in learning martial arts after the experiment was 93.87 and 15.08. The p-value was $0.043 < 0.05$, which was significantly different. In the control class 3, the interest in learning taijiquan before the experiment was 86.32 and 12.28, and the interest in learning taijiquan after the experiment was 81.36 and 13.83, with a p-value of $0.155 > 0.05$, which was not significantly different. (Table 6) The reasons may be: the program selected the technical content of the routines that college students are interested in learning, and the content of the single practice routines also increased the gongli, sparring routines, through a richer practice content and form, which improved the students' interest in learning martial arts; experimental class 1 took "attack and defense techniques" as the main line of martial arts teaching, followed the rule of "sparring" and then "practice" in the development process, and divided the training procedures to meet the needs of college students for "practical attack and defense". The control class 3, on the other hand, followed the conventional teaching. The procedure was to teach the traditional basic skills first, and then to teach single practice and sparring practice, which was a single and boring form of teaching. Therefore, the data showed that the design and implementation of the content and procedure of this program can significantly increase the interest of college students in learning Taijiquan.

Table 2 Analysis of interest in martial arts learning before and after the experiment in experimental class 1 and control class 3 (n=54)

Classes	Before Experiment	After Experiment	T	P
Experimental1 class1	83.26. ± 16.46	96.86. ± 15.08	-2.198	0.043*
Experimental2 class1	86.32 ± 12.25	81.36 ± 13.83.	1.513	0.155

Note: Note: * represents significant difference $P < 0.05$; ** represents highly significant difference $P < 0.01$

Experimental results and analysis of technical level

The technical scores were divided into three dimensions: standardization and proficiency, strength and coordination, and rhythm and style; combined with the characteristics of this study, six martial arts experts were asked to score each dimension of the students' single practice and sparring routines by watching videos, and the average score of each dimension of the students by the six martial arts experts was finally set as the final score of that dimension of the students. The scores of each dimension of martial arts skill level in each class after the experiment were statistically and analytically analyzed according to the independent samples t-test as follows:

Table 3 Analysis of single practice norms and proficiency dimensions in experimental class 1 and control class 3 (n=54)

Dimensionality Before Experiment(X ± SD)	After Experiment (x ± SD)	T	P
Proficiency	8.11 ± 0.70	81.15 ± 0.93	2.389 0.669

Note: * represents significant difference P<0. 05; ** represents highly significant difference P<0. 01

4.4 Experimental Results and Analysis of Wude-Wu Rites

After the experiment of Taijiquan transmission, students in the experimental class (Class 1) and the control class (Class 3) were interviewed about their martial virtue and martial rites. The interview was conducted in the form of a single examiner's question and a single student's answer, and three questions were selected to examine the students' perceptions of wu-de wu-li. The examination was conducted.

Conclusions and Discussion

Conclusions and Discussion

(1) Through the experimental verification, there is a significant difference between the experimental class and the control class, so it can be inferred that the program is feasible.

(2) Through long-term infiltration of students' martial arts culture in four aspects: "Taijiquan culture exhibition, general knowledge of Taijiquan culture, Taijiquan culture story, and Taijiquan culture Q&A", the level of Taijiquan culture awareness was improved; in the transfer of Taijiquan, through experimental verification, there was a significant difference between the experimental class and the control class in general, so it can be inferred that the program has the feasibility, so that the knowledge transfer can be optimized in a real sense. Better promote the development of taijiquan and the use and transmission of scientific exercise methods for body cultivation. At the same time, it stimulates students' inquisitive thinking, i.e., makes them curious about learning, which triggers different levels of interest and preference for learning, and creates a learning environment in which students think independently and freely, think creatively and explore continuously. The diverse combination of classroom teaching and observation experience; the integration of philosophy of life, sports aesthetics and martial arts etiquette, etc. Scholars' studies on the knowledge structure of taijiquan have shown that, at present, the knowledge structure in the process of taijiquan transmission has not yet adapted to the needs of physical education reform, and the methods and forms of the transmitter are the key to knowledge transfer research, from the five stages of acquisition, communication, application, acceptance and assimilation The application in the experimental program of taijiquan transmission has gained some research

Suggestions

This program serves as an example of the popularization and promotion of taijiquan among college students. In the specific implementation process, the content of its type of boxing can be taught according to the model designed in this research program, changing its content. In addition it should be based on the actual development needs of society and the pace of progress required conditions, and then accelerate the improvement mechanism of the curriculum, strengthen the creation of tutorial materials, and again strengthen the regulatory mechanism and supervision related to tutorial materials

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