Research on the Application of Cognitive Education in Physical Education

Ou Zhihua

Hezhou University, Hezhou, Guangxi, 542899, China Email: Ouzhihua@163.com

Keywords: Cognition, Physical Education, Applied Research

Abstract: Physical Education is a Process of Dialogue between Teachers' Teaching and Learning. the Purpose of Our Education is to Enable Students Not Only to Master Basic Technical Skills and Knowledge, But Also to Choose Learning Methods, So That Students Can Learn to Choose and Use Learning Methods. in Order to Improve Students' Initiative and Creativity in Learning, Students Can Acquire the Ability to Analyze and Solve Problems. in the Process of Physical Education, We Should Emphasize the "Guidance" of Teachers and Ignore the "Learning" of Students, So as to Keep Students from Moving. the Improvement of Learning Interest and Learning Ability Directly Affects the Level of Learning Ability of Students, the Speed and Quality of Technology Domination. through Consulting Sports Technology Education Data, There Are Few Comparative Studies on Learning Methods and Learning Effects. This Study Focuses on Students' Learning and Analyzes the Effect of Cognitive Strategy Guidance on Taekwondo Professors through Experimental Research.

1. Introduction

With the Rapid Development of Modern High Technology, Sports Science and Biology, Mechanics, Psychology and Other Fields Cross, Forming the Development Trend of Sports Science - the Benign Integration and Complementarity of Fields. It is Very Important to Use Cognitive Strategies in Taekwondo Education. People Who Don't Study. Physical Education is a Process of Dialogue between Teachers' Teaching and Learning. the Purpose of Education is to Enable Students Not Only to Master Basic Technical Skills and Knowledge, But Also to Choose Learning Methods, So That Students Can Learn to Choose and Use Learning Methods[1]. Learning Can Improve Students' Initiative and Creativity, Help Students to Analyze and Solve Problems. in the Process of Physical Education, We Should Pay Attention to the "Guidance" of Teachers and Ignore the "Learning" of Students, Which Can Not Improve the Enthusiasm and Ability of Learning. the Level of Students' Learning Ability Directly Affects the Speed and Quality of Technology Domination. I Consulted the Teaching Materials of Sports Technology. There Are More Researches on Education Methods and Teaching Methods, and Less Researches on Learning Methods and Learning Effects from the Perspective of Students[2]. This Study Focuses on Students' Learning by Using the Cognitive Strategy Guidance of Taekwondo Professors, and Analyzes the Influence of Cognitive Strategy Guidance on the Effect of Taekwondo Education through Experimental Research.

2. The Significance of Sports Cognition

Sports is an important foundation of China's sports industry, which determines the power and direction of the development of China's sports industry[3]. According to the reform of China's sports industry, the socialization of sports, especially the important direction of economic, cultural and social development and reform, which has a huge impact on the development of sports education, therefore, the socialization of sports actively adapts to the needs of social development of physical education, China's economic culture and social development[4]. Many researchers in the traditional single education model, created this foundation, established new education ideas and prospects, trying to socialize the formation of the new model of physical education, and then asked actors to train, improve the quality. However, physical education mode belongs to a systematic

method system which includes a series of elements such as organization, design, adjustment and control. Based on the feedback theory and regulation theory in psychology and cognitive theory, the implementation of physical education model plays an important role in the implementation of the important impact, improve the effect of physical education [5].

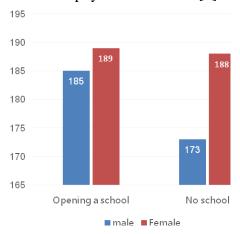


Fig.1 List of the Proportion of Men and Women Who Have and Do Not Offer Outdoor Sports Courses in the Surveyed Colleges and Universities

3. The Influence of Cognitive Strategies on Students' Learning Methods

In education, the effect of "learning for learning" not only depends on the guiding conditions and the leading role of the teacher, but also is influenced by the students' learning desire, learning desire, attention state during learning and other qualities[6]. "Learning" is mainly to improve students' selflearning and self-monitoring ability. Cognitive strategy is the way to improve students' learning. That has a strong quality of silence. Students need to implement their own internal control. In the process of implementing cognitive strategy, how can teachers apply their own strategies to Taekwondo education and stimulate students' enthusiasm for learning? This is an important and difficult problem. This study proposes a method of integrating cognitive strategies into Taekwondo instruction. That's mainly based on stimulating students' learning thinking[7]. In addition, we should fully mobilize students' initiative and enthusiasm in learning. In addition, actively acquire knowledge, develop intelligence, and make them think independently. When your knowledge strategy is triggered, it will be set according to the content before you teach Taekwondo. The specific content of cognitive strategy shows that when Taekwondo technology is used, students slowly learn the same problems as students. In order to solve the problem of using cognitive learning strategy, the questions used are rewarded as well. Secondly, the rules of each sub strategy of cognitive strategy are trained. Finally, we need to stimulate the application of students' cognitive strategies with touching, so that teachers can play a full role. After the experiment, the experimental group and the control group were compared with the cognitive strategic ability[8]. Compared with the control group, in the experimental group with obvious cognitive strategy training, the students' self-learning ability and self-adjusting ability are better than the control group, and they care more about sports. Research shows that in the process of learning, students often use repetition strategy, fine processing strategy and organizational strategy. For example, in the repeated pottery pot strategy, the promotion of using memory obstruction, the recitation of the first reason for using Taekwondo memory[9]. Under the guidance of teachers, students not only learn the skills, tactics and routines of Taekwondo, but also learn the methods of Taekwondo and choose to use cognitive strategies.

4. The Influence of Cognitive Strategies on Students' Sports Ability

The educational effect of Taekwondo Players is mainly from four aspects: theoretical result, technical result, actual combat result and learning attitude. After the experiment, the experimental

group is better than the control group in theory, technology and actual combat, with a large growth. In terms of theoretical results, the experimental group is better than the control group because of the implementation of cognitive strategy guidance. In this process, the teacher scattered many recitation rules and methods in the guidance. At the same time, he noticed the "learning" of the students, which greatly improved the learning efficiency. In terms of technology, the main investigation is basic footwork and basic feet. In the basic footwork, the experimental group and the control group performed differently. The main reason is that the basic footwork is relatively simple and difficult. Basic leg techniques require strong movement. Because of its fast speed, coherence and so on, the reason why the experimental group is superior to the control group is that it can grasp the key and difficult points more accurately and has clear objectives. The students in the experimental group applied the techniques and tactics reasonably, responded quickly, and the timing was very accurate. Smooth execution, strong attack and defense conversion capabilities. The reason for the analysis is to infiltrate cognitive strategy guidance in the experimental process, improve the ability of analyzing and solving students' ability, and flexibly use skills and tactics in the actual combat process. At this level, there was no difference in learning attitude between the experimental group and the control group. The main reason is the study of learning attitude, mainly based on time and attendance. Motor ability refers to the special behavior of mastering motor ability and effectively executing human motion. The biggest characteristic of motor skill is that motor technology needs a long time of practice before motor automation. The main purpose is to find the muscle sense of exercise. The formation of motor ability in the three stages of automation and proficiency is different from the formation of cognitive directivity and connection. This needs to be selected and applied according to the tasks of each stage. For example, in the connection formation stage, the main task of this stage is to improve the movement of Taekwondo technology. In this stage, in order to improve the standardization, accuracy and stability of action strategies, students will generally use them in fine processing strategies, action intention memory and activation applications.

5. The Application of Cognition in Sports

There are some problems in the application of sports cognition. Nowadays, the level of students' sports skills is generally low, especially when they encounter unknown learning content in the process of learning sports skills, they always use traditional methods. Imitate the teacher's actions in order to complete the study of sports ability. Therefore, how to develop students' sports ability and cognitive learning strategy is a problem that should be solved in sports.

5.1 Self Prompting Strategy

The research suggests that self suggestion contains a lot of metacognition. For example, when you come across a new technology sport in the process of learning motor skills, it will advise you: what to do if there are similar links? "However, these questions are not asked by others, but your own questions, which will help you develop metacognitive ideas and habits and help you solve problems. At the same time, through repeated self prompts, students should carry out their own style of motor skills learning under the monitoring and adjustment of motor skills. He proposed risk and three other methods of self prompting strategy training. First, write a document, "what is the purpose of learning this kind of sports ability? Why should we solve difficulties in the process of learning sports skills?" second, please write down the whole process of thinking about sports ability difficulties. Finally, write down what you must pay attention to when using this strategy.

5.2 Self Reflection Strategy

Introspection belongs to the category of cognitive concept in cognitive psychology. In sports learning activities, antonyms are the characteristics of learning sports ability. Monitoring is the core link of reflection, such as analyzing problems, formulating the way of thinking about problems, solving problems and taking measures. In order to reflect on the strategy itself, it is suggested to pay attention to the mistakes and types of Yi - fan and what lessons can be learned from "what kind of strategy to use".

5.3 Equivalence Strategy

In the process of learning sports skills, students ask questions, answer, explain and discuss each other. However, in the process of implementation, teachers need to be consciously stimulated and trained, and students need to accumulate and enrich knowledge and experience.

6. Conclusion

As a new teaching mode, cognitive education can effectively help students improve their comprehensive quality when applied to physical education.

References

- [1] Petra Jansen, Jan Ellinger, Jennifer Lehmann. (2018). Increased physical education at school improves the visual-spatial cognition during adolescence. Educational Psychology, pp. 1-13.
- [2] Oyvind J, Knox B J, Helkala K, et al. (2017). Macrocognition applied to the hybrid space: team environment, functions and processes in cyber operations.
- [3] Juan Cristobal Castro-Alonso, Fred Paas, Paul Ginns. (2019). Embodied Cognition, Science Education, and Visuospatial Processing. Visuospatial Processing for Education in Health and Natural Sciences.
- [4] Tivadar B K. (2017). Physical activity improves cognition: possible explanations, pp. 1-7.
- [5] Kristian P. Nitsch, Kaitlin B. Casaletto, Noelle E. Carlozzi,. (2017). Uncorrected versus demographically-corrected scores on the NIH Toolbox Cognition Battery in persons with traumatic brain injury and stroke. Rehabilitation Psychology, vol. 62, no. 4, pp. 485-495.
- [6] D. Wybrecht, F. Reuter, F. Pariollaud,. (2017). New brain lesions with no impact on physical disability can impact cognition in early multiple sclerosis: A ten-year longitudinal study. Plos One, vol. 12, no. 11, pp. e0184650.
- [7] Simon B. Cooper, Karah J. Dring, John G. Morris,. (2018). High intensity intermittent games-based activity and adolescents' cognition: moderating effect of physical fitness. Bmc Public Health, vol. 18, no. 1, pp. 603.
- [8] Jeanette E. Owusu, Shahidul Islam, Subhashini S. Katumuluwa,. (2019). Cognition and vitamin D in older african "merican women—physical performance and osteoporosis prevention with vitamin D in older african americans trial and dementia. Journal of the American Geriatrics Society, vol. 67, pp. 81-86.
- [9] Liu, Wanting, Fan, Jie, Gan, Jun,. (2017). Disassociation of cognitive and affective aspects of theory of mind in obsessive-compulsive disorder. Psychiatry Research, vol. 255, pp. 367-372.