



Meditation Development Model to Improve Training the Table Tennis Skills of Primary School Students in Guangzhou City

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Received 13/10/2023

Revised 15/10/2023

Accepted 22/10/2023

Abstract

Background and Aim: In recent years, table tennis has developed rapidly throughout the country and abroad. At present, primary school students are in an important stage of physical and mental development while paying more attention to the development of physical and mental health. However, there are fewer studies on mindfulness training for primary school students. This study aimed to develop a mindfulness training model to improve table tennis skills for primary school students in Guangzhou city.

Materials and Methods: This study is a research and development type. The researcher divided the boundaries of the sample group into 3 groups as follows 1. Teachers of table tennis in primary schools in Guangzhou City, a total of 196 teachers. 2. 19 experts, consisting of 10 table tennis coaches, 4 primary school table tennis teachers, and experts. In the area of meditation, there were 5 people selected from a specific selection. 3. 7 experts in the development of meditation training models towards the development of table tennis skills at the primary school level. Using mixed methods research there are qualitative research methods and quantitatively divided into 3 phases: Phase 1: Assessment of the table tennis learning conditions of elementary school students in Guangzhou; Phase 2: Develop a meditation training model and table tennis skill development. at the primary level With the Delphi technique; Phase 3: meeting with experts to confirm and certify.

Results: 1. The results of the evaluation of meditation, mindfulness, and table tennis skills training found that (1) It increases concentration in studying. (2) Table tennis skill training promotes concentration. (3) Helps promote and Practice movement skills. (4) Instructors must have high-level table tennis teaching skills respectively. 2. It was found that in the area of meditation and mindfulness training practicing Qigong consists of activities to practice Qigong to strengthen mindfulness and concentration in 4 poses of meditation practice and breathing practice that include: Breath adjustment poses, Chest stretching pose, Tha Inika Soaring Sky pose and Shankaya breath pose. Most had consistent opinions on all items (interquartile range 0.00 - 0.50).

Conclusion: Developing a meditation practice style combined with table tennis skills. It's extremely good because of the practice of Qigong it is the basic culture of China that has a history of over 1000 years. A model for applying mindfulness and concentration in table tennis. It gives Chinese athletes their own identity, especially at the youth level. The use of Qigong, which is a practice of body, mind, concentration, and breath, is admirable to be able to combine concepts and approaches so perfectly. Experts have further presented that the development of this model will help promote Confidence for athletes.

Keywords: Mindfulness Training; Table Tennis Skills; Primary School; Guangzhou City

Introduction

The term positive thinking refers to the awareness that arises through intentional, purposeful, non-judgmental, attention to and awareness of the present moment, and encompasses both self-regulation of awareness and attitudes to one's own experience, and many studies have shown that positive thinking is inextricably linked to a range of positive outcomes in the present moment and that it is one of the more effective psychological interventions (Yu, Shuting & Xu, Yu & Liu, Xinghua & Xiao, Luchuan, 2019). Some experts believe that mindfulness training helps to improve the learning experience of beginners, nowadays positive thinking has an important place in cognitive-behavioral training in sports, which generally refers to the improvement of athletes' performance, mental state, and sense of well-being, compared with the traditional cognitive-behavioral training, mindfulness training helps to change the poor mental state of the sportsperson to achieve an optimal mental state, mindfulness training is an alternative method that It allows the person engaged in training to experience their learning process, in a state of positive thinking, the individual adopts an accepting and non-judgmental approach to acting as well as thinking, and is not attempting to change or control these pre-existing experiences, therefore mindfulness training can help the individual to avoid negative mental states.

In recent years, table tennis has been developing rapidly throughout the country and even abroad,



with many countries around the world starting to organize international tournaments, invitational tournaments, amateur tournaments, and commercial tournaments, such as global WTT tournaments, Chinese private commercial tournaments, and so on. Based on this reality, the development of table tennis clubs in China has been greatly improved, and the number of people participating in table tennis has been increasing, which has also played a positive role in the national fitness activities advocated by China. According to the results of relevant literature research, the psychological quality of table tennis players has a direct relationship with the competition results (Zhang Yunke & Yu Yang, 2022), and also plays a key role in the articulation of physical strength and skills and tactical level of play. However, with the development of the times and the unique attributes of the sport to guide the teaching and training, competition organization, and training of reserve talents, such research is one of the best in the world, but the teaching content of the psychological training method for table tennis players is very little.

With the progress and continuous development of the times, psychological problems have become a hot topic of discussion in today's society. Psychological training refers to the specific methods and means to ensure that athletes can have high psychological quality, avoid the influence of psychological barriers, and then achieve good results in the process of training or competitions, from the point of view of the influence of mindfulness training on the learning of table tennis by primary school students. From the point of view of the influence of mindfulness training on the learning of table tennis, the author believes that mindfulness training can promote the learning of table tennis. Positive thinking is a term proposed from the psychological point of view since it is a psychological level, it can be associated with table tennis, table tennis not only needs to have the support of technology but also occupies a very important position at the psychological level (Zhang Yu, 2020). At present, primary school students are in an important stage of physical and mental development, at the same time to pay more attention to the development of physical and mental health, no longer single focus on the economic ability of this group, all-round attention to students. Therefore, in the actual teaching process, to tell students about sports-related psychological knowledge, prompting students to master effective psychological training methods, improve the psychological quality level of table tennis players, and then effectively enhance the table tennis teaching, table tennis teaching, guidance to lay a solid foundation for the future engaged in table tennis teaching, table tennis to lay a solid foundation table tennis is also widely loved by the public, for the training of the positive thinking, the scope of the involved.

According to Professor Kabat-Kenn's theory, mindfulness can be used to represent the process of paying attention. In the process of mindfulness, people can focus on psychological feelings and external activities, that is, the way the individual focuses objectively and here and now based on self-will. In the study of Baer et al. (2003), they referred to the definitions of mindfulness in various academic circles and concluded a relatively complete statement, that is, what mindfulness describes is a kind of people who focus on their current activities. According to Bishop et al. (2004), the concept of mindfulness can be described in two aspects: (1) The characteristics of the state held in the control of attention, including external attitudes, acceptance of current activities, attention, etc.; (2) Focusing on and regulating the current experience, that is, using relevant technical means to pay attention to people's acquisition of new things. Cahn and Polich (2006) believe that mindfulness belongs to psychological traits or mental states, thus dividing mindfulness into two categories, and the classification of these two categories is based on the length of time it lasts in the human brain. The former is a change that lasts for a long time, which can change the individual's ideas, self-awareness, etc.; while the latter is a change in the state, which is uncertain and changes at any time. But the two also have something in common, that is, changes are obtained through individual thinking and understanding.

However, there are fewer studies on mindfulness training for primary school students, so the author would like to verify the influence of mindfulness training on primary school students' learning of table tennis through experimental research, which can promote the psychological growth of primary school students on the one hand, and open up more horizons for mindfulness training in the field of table tennis on the other hand, and enrich the training methods of table tennis to the fullest extent. table tennis training methods.

Objectives

To develop a model of mindfulness training to improve table tennis skills for primary school students in Guangzhou city.



Literature Review

This study mainly focuses on whether mindfulness training can promote the learning of table tennis for primary school students. The following literature and research will be reviewed on the five aspects of mindfulness training and table tennis. The specific chapters are as follows: Mindfulness Training, Table Tennis, Developing Program, Related Research, and Summary.

1. Mindfulness Training

1.1 Mindfulness

The word “mindfulness” first appeared in the “Four Mindfulness Sutras” 2,600 years ago, which is the core Zen method in primitive Buddhism. In the 20th century, as Burmese Zen masters began to give lectures in the West, Eastern meditation gradually became popular in the West, and Western countries paid more and more attention to it. In the 1970s, medical practitioners and psychologists in many fields of practice began to conduct in-depth and comprehensive research on mindfulness. Dr. John Kabat-Zinn of the University of Massachusetts Medical Center was one of the first scholars to study mindfulness. He separated himself from mindfulness practice and religion and chose to use it in his patients' pain management and stress management. In 1979, Mindfulness-Based Reduction Therapy (MBSR) was established. Practicing methods such as thinking and sitting meditation can be attributed to the category of Buddhist meditation. “Mindfulness Sutra” The two Buddhist scriptures that we are more familiar with, “The Sutra of Breathing and Breathing”, have made more specific explanations of mindfulness. For Buddhist meditation, mindfulness is always regarded as a crucial element in Buddhism. Buddhists also pay more attention to mindfulness in the process of practicing. The cultivation and teaching of mindfulness is a comprehension for them. The true meaning of Buddhism. Subsequently, mindfulness has been widely developed in Southeast Asia. Based on the fact that mindfulness has a good dredging effect on people's psychological problems, it can make people come back from the inertia of ignorance and unconsciousness, and thus contact all the possibilities of conscious and unconsciousness in real life. According to the above content, for modern psychology, mindfulness has gradually become a systematic therapy that can play a role in positive psychological suggestions. In academia, the concept of mindfulness is defined in many ways. Scholars at home and abroad have different opinions on the definition of mindfulness, which can be summarized in three aspects: mindfulness can be used as a method to describe changes in mental states, and can also be used to summarize certain psychological characteristics.

According to Professor Kabat-Kenn's theory, mindfulness can be used to represent the process of paying attention. In the process of mindfulness, people can focus on psychological feelings and external activities, that is, the way the individual focuses objectively and here and now based on self-will. This definition is widely accepted, and it describes a kind of state of directed, focused attention to current activities.

In the study of Baer et al. (2003), they referred to the definitions of mindfulness in various academic circles and concluded a relatively complete statement, that is, what mindfulness describes is a kind of people who focus on their current activities. The process is a way of acceptance and non-judgment; Bishop and others believe that mindfulness describes a change in a psychological state, and people understand and master new things, and then adjust a series of changes in their self-state. According to Bishop et al. (2004), the concept of mindfulness can be described in two aspects: (1) The characteristics of the state held in the control of attention, including external attitudes, acceptance of current activities, attention, etc.; (2) Focusing on and regulating the current experience, that is, using relevant technical means to pay attention to people's acquisition of new things, new knowledge acceptance, experience acquisition process, and continuous attention to the views and experiences formed by people in this process.

Cahn and Polich (2006) believe that mindfulness belongs to psychological traits or mental states, thus dividing mindfulness into two categories, and the classification of these two categories is based on the length of time it lasts in the human brain. The former is a change that lasts for a long time, which can change the individual's ideas, self-awareness, etc.; while the latter is a change in the state, which is uncertain and changes at any time. But the two also have something in common, that is, changes are obtained through individual thinking and understanding. For my country's theoretical circles, Professor Liu Xinghua has made more achievements in this area. In Professor Liu's view, mindfulness is an active and objective behavior of paying attention to current activities. All attention is on itself, and understanding of one's changes and states can be used for self-spiritual training.

Leunes, A. D., & Nation, J. R. (2005) point of view is that: When a person has not been trained



in meditation, he is like a monkey following a mad elephant, aimless and panicked. Mindfulness is also used to train people's concentration. It can adjust people's minds, and enhance self-knowledge and self-communication, thereby improving the trainer's concentration on the moment and cultivating their focused thinking. Ability. To this day, the concept of mindfulness has not yet reached a unified point of view, but it can be concluded that the use of mindfulness training can improve people's concentration. This kind of training helps trainers pay close attention to this moment.

Cultivate an attitude of tolerance and acceptance of current experience. Mindfulness, which allows athletes to cope well with adversity during competition and promotes athlete excellence, has been attributed to a mechanism of self-regulation that includes emotion and attention regulation. There are two main forms of mindfulness, one is awareness and the other is training. The former is mainly an individual's spiritual change, while the latter is mainly to use of certain methods for training, which can cultivate the willpower and thinking ability of the trainer.

1.2 The development status of mindfulness training at home and abroad

Regarding the definition of mindfulness, the views of its founder (Kaufman, K. A., Glass, C. R., & Arnkoff, D. B., 2009) have a relatively good acceptance: Conscious awareness (On purpose), living in the present moment (In the present moment), and not making judgments. There is a strong connection among the above definitions. The so-called living in the moment is based on the individual's observation and analysis of his own experience and state, and when facing pressure, he should admit the existence of pressure and be able to coexist peacefully with it, that is, "conscious awareness" is the foundation and core; "Not judging" is the guarantee; "Being present" is the result and purpose. Although the effect of mindfulness training is not just to achieve "living in the moment", but to achieve the "wisdom" that Buddhism can achieve, Zhang Ben (2023) proposed the concept of "enlightenment", and the "behavioral input" of ACT and MAC is proposed. According to the combing of literature, the training methods of mindfulness (behavioral intervention methods based on mindfulness), these training methods use mindfulness techniques to enable practitioners to achieve "acceptance" in the face of negative experiences and are the third generation of recognized Common features of cognitive behavioral therapy. Although there are a variety of meditation practices in mindfulness therapy, they are similar in basic procedures and goals, because mindfulness therapy is a derivative training method of meditation practice. Mindfulness training has a large market in psychological applications; intervention studies using mindfulness training have achieved significant effects on clinical symptoms such as eating disorders, long-term pain, addictive behaviors, suicide, drug abuse, anxiety, and depression. Mindfulness training is also applicable to normal people. Mindfulness training has positive effects on immune function, self-cognition ability, self-worth affirmation, psychological well-being, professional ability, sustained focus ability, academic performance, emotional regulation, and even the physical and mental health of ordinary people. enhancement.

Since the 1980s, in sports psychology, the general mainstream research direction is the traditional psychological skills practice, which is carried out with cognitive behaviorism as the main content, mainly including the following aspects: biofeedback, suggestion, goal setting, activation, in addition to anxiety control, progressive relaxation, observation of appearances, etc. At present, mindfulness training is also constantly developing and gradually has more research support. In terms of sports psychology, it is also gradually applied and developed, mainly in two aspects: one is the mindfulness-acceptance-commitment intervention program, and the other is the mindfulness score improvement program. At present, the development of the former is complete and more mature, and it has also obtained many proofs. It is a mental activity pre-treatment method developed by Gardner and Moore based on the acceptance and commitment therapy ACT and mindfulness cognitive therapy MBCT in the clinical field. This method is based on mindfulness training. The so-called MAC training method is very different from the previous methods. This method has the following characteristics: 1. It does not require the trainer to exercise the so-called mental state but requires the trainer to focus on the present moment. Activities, objectively look at and accept them, and also pay attention to the content related to the training tasks, so that you can normally focus on the task training. In the past, training methods mainly focused on resolving irritability, burnout, and other psychology generated in the trainer's heart, in an attempt to keep the trainer in a positive state of mind for better training. This approach has a strong control concept. However, the optimal condition standard for each athlete is very difficult to define, and the individual differences of athletes make it difficult for PST to operate smoothly when intervening. In addition, the previous training methods believed that the mental state of the trainers would affect their training performance, so we should start with changing the mental state of the trainers



to improve the exercise ability of the trainers. Based on this assumption, the training method does not pay attention to the trainer's learning state and the environment; in addition, the mental state adjusted by the trainer is likely to change with the state of the game. Therefore, the previous training methods put too much emphasis on the control of mental state, while ignoring other aspects, and there are deficiencies. Long-term use of this method is likely to hurt the mental state of athletes. To change this deficiency, the MAC training method was designed. This form of training does not change the athlete's mentality and thinking but makes the trainer pay more attention to its training purpose. By focusing uncritically on the task, itself, the trainer focuses on the stimulus itself and achieves behavioral engagement related to the performance task.

1.3 Status of Foreign Development

In the sports world, there have been cases of using mindfulness training in real competitive sports in the past, such as former NBA Bulls and Lakers coach Phil Jackson, the ace athlete who led his team to win as many as eleven championships. One of the secrets of his success is that he led the team members to conduct a complete meditation practice, which is extremely important for improving the training ability of the players.

In addition, in golf, some scholars such as Marjorie Bernier have conducted mindfulness training for a small number of athletes. The training results show that after receiving the training, the athletes' ability to judge the course has been significantly improved.

De Petrillo, et al (2009) used mindfulness training in long-distance running to train athletes in groups, divided them into experimental groups and control groups, and intervened with MSPE in the experimental group, while the control group trained normally. After two months of training, it was found that After the MSPE intervention, the anxiety level of the athletes decreased to a certain extent, while the execution ability of sports improved to a certain extent.

Gould, D., Flett, R., & Lauer, L. (2012). also found that through mindfulness training, athletes' free throw percentage can be effectively improved.

Kee (2012) et al. conducted mindfulness training on some students in the sport of roller skating and found that this part of the students had better athletic ability and performance in the competition. In the past ten years, under the influence of the third generation of cognitive behaviorism, the improvement of athletes' performance and behavior level is based on the theory of "mindfulness-acceptance"-The Mindfulness-Acceptance-Commitment Approach (MAC).

1.4 Domestic Development Status

Zhang Hui (2012) also selected a group of swimmers from colleges and universities, conducted related meditation training experiments, and tried to compare the athletes' heart rate, mental state, and physical exhaustion. There is a certain improvement in the group, and then there is a certain improvement in the athlete's competitive level.

Through the application of MAC, Bu Danran (2013) selected three Sanda athletes from the Hubei Provincial Team of China as the research object and conducted a single-subject test. Improvement, according to the survey, its motor skills are more stable and its performance is better. Through the application of MAC theory.

Zhang Gezi (2013) conducted a single-subject experiment with four martial arts athletes in Guangdong Province, China. The results are the same as above. The two studies further support that MAC psychological intervention can effectively improve the athletes' sports level. The empirical research of Chinese sports psychology has also gradually substituted the concept of MAC. For different sports forms, because of the obvious differences in characteristics, the corresponding training methods are also different. To sum up, mindfulness-based pre-training techniques at home and abroad have made great progress in the field of competitive sports. Mindfulness training can improve the process of athletes' skill learning, improve athletes' competitive performance, and stabilize athletes' performance. for athletes.

To sum up, mindfulness training has been widely combined with other competitive sports and has achieved good results. Therefore, the author believes that mindfulness training should be paid more attention to, and in-depth research should be carried out to reflect its value and significance.

2. Table Tennis

2.1 Concept of Table Tennis

Table tennis is a kind of sport against the net. It has relatively low requirements for the venue. During the exercise, it will mobilize various systems of the body. Constantly running, turning, swinging, and hitting the ball. During this process, the upper and lower limbs of the participants, including the



muscles of the waist and abdomen, can be fully exercised and exercised, which can not only improve the exerciser's strength, sensitivity, response, and other qualities but also play a role in blood circulation. A certain positive promotion effect, and then ensure the stable operation of the cardiovascular system and respiratory system. After long-term table tennis exercise, it can increase lung capacity, improve muscle durability, and make the heart strong, thereby promoting physical and mental health.

Table tennis is a sport that integrates fitness, entertainment, intelligence, and making friends. It is deeply loved by the majority of Chinese people. It is also known as China's "national ball game". Restrictions and influences such as objective conditions have unlimited development space in all weathers and at times. Therefore, table tennis has gradually evolved into a popular competitive sport. At the same time, table tennis is a kind of sport suitable for all ages. Due to the characteristics of table tennis, it is suitable for men, women, and children. Before playing table tennis, the amount of exercise can be determined according to the actual situation of individual age, physical fitness, equipment venue, and sports level. Children and teenagers can cultivate and participate in sports as their interests and specialties, improve physical function, and promote growth and development: the elderly and the infirm can participate in this sport as a health care rehabilitation, enhance the function of cardiovascular and nervous systems, and can effectively prevent heart disease in the elderly. Disorders of the blood vessels and nervous system.

2.2 The development status of primary school table tennis teaching and training

In elementary school, children's physical and psychological development is immature, showing more excitement than inhibition, poor concentration, strong curiosity, strong imitation of things, but poor self-control and weak adaptability. Efforts to innovate teaching and training methods, effectively improve children's interest in table tennis learning through reasonable and efficient training methods, and pay attention to the cultivation of learning interest can gradually improve the level of table tennis teaching in primary schools. At the primary school stage, table tennis is very popular. However, the training methods are relatively traditional and cannot effectively improve the table tennis level of students. Dong Lanxin (2019) pointed out three teaching status quos in his published article: First, the curriculum setting is unreasonable. According to the survey, most primary school table tennis teaching cannot guarantee the cultivation of students' interest and skill improvement, and the learning time is short, which cannot guarantee the teaching quality at all. Efficiency: The second point is that the construction of the teaching staff needs to be strengthened. Elementary school teachers have relatively simple professional requirements, and cannot give students correct skill guidance, and cannot guide students to learn accurate basic technical movements. The first point is that students cannot recognize their own mistakes, which hinders the improvement of the technical level; the third point is that the teaching method is boring and unattractive, which is not conducive to students' learning of movement skills.

Due to the different levels of economic development in various regions, the problem of insufficient school space and equipment is still quite prominent. Many schools still have concrete tables; the lack of teachers is very unfavorable for the cultivation of reserve talents. Wang Jincan and Li Shufang (2005) pointed out in "The Current Situation and Prospects of Chinese Table Tennis Athletes Selection" that the selection of table tennis players should start from a young age, and a high-quality training mechanism should be established to prepare for the cultivation of super strong reserve talents. Popularity is good, but there are many restrictive factors, which is not conducive to the further development of table tennis in primary schools.

Primary school is the best time to learn basic table tennis skills and develop physical fitness. The cultivation of athletes in our country tends to be younger. Domestic amateur table tennis training in primary schools is developing into clubs and training classes, but the amateur table tennis teaching and training model in my country is not yet perfect, and the amateur table tennis training model for elementary schools has not yet been unified. The traditional training mode generally has problems such as long training time and short training time for students. It is very difficult for traditional training methods to comprehensively improve primary school table tennis skills in a short period. The methods, content, means, and evaluation of amateur table tennis training in primary schools in China are too traditional, which is not conducive to individual development and cannot meet the requirements of the development of the times.

3. The development of a training program

3.1 Concept of planning

Planning is the prior prediction, arrangement, and contingency treatment of future activities.



The purpose of the plan is to achieve the various goals proposed, and each plan is aimed at a specific goal. Therefore, a plan must first clarify the goal that the plan is aimed at. After the goal is clear, basic issues such as how to do it, who will do it, when to do it, where to do it, and how much resources need to be invested must also be explained in the plan.

3.2 Related concepts of the training plan

The training program is a complex combination of many interventions, which often change over time due to staging, and all basic decisions are likely to be based on scientific evidence (Zhang Ben, 2023). Research has shown that an entirely evidence-based alternative is an evidence-based approach and only a partial training program decision is the best currently available. Many training adaptations are highly variable, and until robust biomarkers of train ability are identified, one should continue to test the athlete's physical state and monitor training variables to allow re-planning if the training prescription does not produce the desired adaptation. A trainer or coach interacts with an athlete or patient when writing a training program or prescribing exercise. Based on patient-centered theory, provide practical training that is mainly athlete- and patient-centered. Use personal performance, health needs, and desires as the driving force behind all decisions. Also consider that most athletes divide their training years into training periods such as preparation, competition, and transition. Alternatives to modular phasing (preparation, competition, and transition) can also be chosen, such as athletes focusing on one movement, strength, or speed in one training module, as many well-trained and successful elite athletes will incorporate segmented periods into their training program. Trainers and coaches agree on goals and write training programs or prescribe exercise regimens, which are then discussed with athletes or patients to evaluate whether the programs and prescriptions meet their needs, desires, and abilities.

3.3 Concepts related to sports training programs

A training program is a complex combination of many interventions that change over time, often due to staging, and all fundamental decisions will likely be based on scientific evidence. Research shows that an entirely evidence-based alternative is an evidence-based approach, and only a partial training program decision is the best currently available. (Wang Yufang, 2023). Many training adaptations are highly variable, and before identifying robust biomarkers of a train ability, one should continue to test the athlete's physical condition and monitor training variables so that when the training prescription does not produce the desired adaptation Re-plan. A trainer or coach interacts with an athlete or patient when writing a training program or prescribing exercise. Based on patient-centered theory, provide practical training that is mainly athlete- and patient-centered. Use personal performance, health needs, and desires as the driving force behind all decisions. Also consider that most athletes divide their training years into training periods such as preparation, competition, and transition. Alternatives to modular phasing (preparation, competition, and transition) can also be chosen, such as athletes focusing on one movement, strength, or speed in one training module, as many well-trained and successful elite athletes will incorporate segmented periods into their training program. Trainers and coaches agree on goals and write training programs or prescribe exercise regimens, which are then discussed with athletes or patients to evaluate whether the programs and prescriptions meet their needs, desires, and abilities.

4. Related research

4.1 Localization Research

As psychological problems have become a hot topic in recent years, the research on mindfulness training has attracted widespread attention from scholars at home and abroad. Judging from the influence of mindfulness training on primary school students learning table tennis, for primary school students, mindfulness training can solve the psychological problems of primary school students. comprehensive physical and mental development.

4.2 Prospective studies

Scholars at home and abroad mostly research college students to discover the impact of mindfulness training on college students, but there are relatively few studies on the impact of mindfulness training on primary school students learning various sports. In addition, in the existing research, foreign scholars use universities in developed countries as the research object, and few scholars study this issue with Chinese primary school students as the investigation object.

5. Summary

At present, in the field of table tennis, there is not much-related literature on the combination of mindfulness training, and most people study mindfulness training and colleges, adults, and other sports. The subjects of the experiment are adults, and there are few studies on children and teenagers, so the idea was born from this, and primary school students were used as subjects for exploration and research.



Conceptual Framework

The research title “A Development Model of Mindfulness Training to Improve Table Tennis Skills for Primary School Students in Guangzhou City” was designed as follows

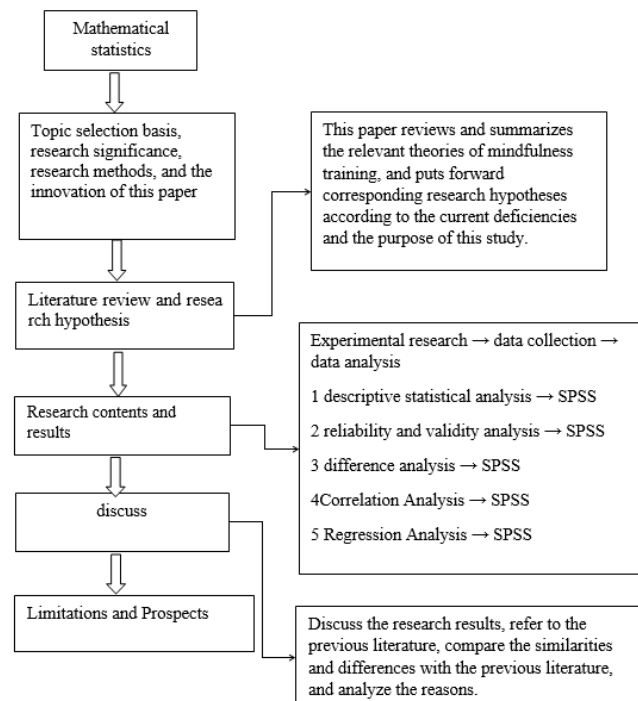


Figure 1: Conceptual framework of the research

Methodology

Population specification and size: This research is for the development of a meditation training model for the development of table tennis skills at the primary school. The researcher divided the boundaries of the population were teachers of table tennis at the primary level In Guangzhou, there were 98 schools, 2 students per school, total of 196 students.

Sampling: Using purposive sampling method as follows: (1) 19 experts, consisting of 10 table tennis coaches, 4 primary school table tennis teachers, and experts. In the area of meditation, there were 5 people selected from a specific selection (experienced Aptitude not less than 10 years) to study opinions according to the Delphi technique. And (2) 7 experts in the development of meditation training models for the development of table tennis skills at the primary school level.

Research tools

1. Evaluation form for the teaching of table tennis skills in primary schools, consisting of 20 questions, consisting of the objectives, and content of teaching table tennis, to be used as a guideline in preparing the Delphi document.

2. Delphi questionnaire for developing models using the Delphi technique. Consists of 3 questionnaires. Issue 1 is an open-ended questionnaire asking about a Model for developing concentration and expert table tennis skills. The 2nd edition is the second round of the Delphi technique questionnaire with a 5-level rating scale. The 3rd edition is the same questionnaire as the 2nd edition but adds suggestions and reasons for each question.

3. outlines the meditation training model that affects the development of table tennis skills at the primary school level. For checking format consistency with Results of the meeting of experts to confirm the correctness and certify the format.



Data collection

1. *Questionnaire Round 1-2*: Created by taking research findings and developing them into an open-ended questionnaire. Using the Delphi technique, round 1 to synthesize and study documents related to meditation and table tennis teaching skills

2. *Questionnaire Round 3*: This questionnaire was created from statements with 80% or more agreement among experts in the second round, categorized according to the scope of meditation and table tennis teaching skills.

Data Analysis

1. Developing a meditation training model that affects the development of table tennis skills at the primary school level by evaluating the management of teaching table tennis skills and the Delphi technique in 3 rounds using analysis with mean and standard deviation.

2. Examining the consistency of the development of meditation training models towards the development of table tennis skills at the elementary level. With a meeting of experts to confirm and certify the format.

Results

1. Results of the assessment of the management of table tennis teaching in primary schools.

Analyze the data as well. Mean and standard deviation. The number of respondents was 196, accounting for 100%.

Table 1 is the assessment of the management of table tennis teaching in primary schools.

Teaching table tennis in primary schools	\bar{x}	SD.	Assessment level
1. Make students have morality	4.23	.63	Good
2. Students have the spirit of an athlete.	4.10	.53	Good
3. Apply table tennis skills to exercise.	4.12	.45	Good
4. Students make good decisions.	3.98	.62	Fair
5. Makes you more concentration in studying.	4.51	.5	Good
6. Table tennis skills Make your body strong	4.21	.52	Good
7. Table tennis skills Help build confidence	4.26	.68	Good
8. Focusing on the table tennis ball creates concentration and mindfulness.	4.41	.45	Good
9. Make the muscles of the hands, arms, and legs have a relationship with the eyesight and brain.	4.35	.49	Good
10. Help promote and practice movement skills.	4.36	.56	Good
11. Students discover their abilities.	4.00	.56	Good
12. Helps create unity and work as a team.	4.11	.41	Good
13. Table tennis cause fun	4.13	.62	Good
14. There is adequate skills training.	3.85	.65	Fair
15. Table tennis skill training promotes concentration.	4.46	.70	Good
16. Table tennis equipment is cheap.	4.32	.54	Good
17. The school has a place to teach table tennis skills.	4.31	.62	Good
18. Teaching table tennis There must be additional activities so that it is not boring.	4.11	.49	Good
19. Students think that table tennis It's a difficult sport.	4.00	.66	Good
20. The instructor must have a high level of table tennis teaching skills.	4.35	.40	Good

From the table 1 found that (1) Makes you have more concentration in studying ($\bar{x} = 4.51$). (2) Table tennis skill training promotes concentration ($\bar{x} = 4.46$). (3) Help promote and practice movement



skills ($\bar{x} = 4.36$). (4) The instructor must have a high level of table tennis teaching skills ($\bar{x} = 4.35$).

2. Analysis results in Delphi data round 1

The open-ended questionnaire that all 19 experts responded to in round 1 can be summarized in two aspects:

1. Practicing meditation and mindfulness by practicing Qigong. Consists of activities to practice Qigong to strengthen mindfulness and concentration in 4 poses of meditation practice and breathing practice that include: Breath adjustment poses, Chest stretching pose, Tha Inika Soaring Sky pose and Shankaya breath pose.

2. Table tennis skills training includes holding a racket, getting familiar with the table tennis ball, hitting the ball with the backhand, hitting the ball with the forehand, practicing bouncing the table tennis ball, practice hitting the ball with the backhand, practice hitting the ball with the forehand, hitting the ball against the wall, training to hit balls in the air, training balls on the table, group training and rules of etiquette.

3. Analysis results in Delphi data round 2

The analysis used median and interquartile range values. As shown in Table 2 The following: Meditation and mindfulness training by practicing Qigong consists of activities to practice Qigong to strengthen mindfulness and concentration in 4 poses, including meditation, and breathing exercises.

Table 2 Model for developing meditation and mindfulness

Development of a meditation training model for the development of table tennis skills in primary school in the aspect of meditation and mindfulness.	Median	IQR.	Assessment level
1. Breath adjustment poses	4.00	0.50	Good
2. Chest stretching pose	4.00	0.50	Good
3. The Inika Soaring pose	4.00	0.50	Good
4. Sky and Shankaya breath pose	4.00	0.50	Good

From Table 2, it is found that meditation and mindfulness training by practicing Qigong consists of activities to practice Qigong to strengthen mindfulness and concentration in 4 poses of meditation practice and breathing practice that include: Breath adjustment poses, Chest stretching pose, Tha Inika Soaring Sky pose and Shankaya breath pose. Most had consistent opinions on every point. (Interquartile range = 0.50)

Table 3 Development of a meditation training model for the development of table tennis skills at the elementary level in table tennis skills.

Development of a meditation training model for the development of table tennis skills at the elementary level in table tennis skills.	Median	IQR.	Assessment level
1. Holding a racket	4.00	0.50	Good
2. Getting familiar with the table tennis ball	4.00	0.50	Good
3. Hitting the ball with the backhand	4.00	0.50	Good
4. Hitting the ball with the forehand	4.00	0.50	Good
5. Practicing bouncing the table tennis ball	4.00	0.50	Good
6. Practice hitting the ball with the backhand, forehand, and against the wall	4.00	0.50	Good
7. Training to hit balls in the air	4.00	0.50	Good
8. Training balls on the table	4.00	0.63	Good
9. Group training	4.00	0.50	Good
10. Rules of etiquette	4.00	0.50	Good



From Table 3, it is found that table tennis skills training Table tennis skill practice includes holding a racket, getting familiar with the table tennis ball, hitting the ball with the backhand, hitting the ball with the forehand, practicing bouncing the table tennis ball, practicing hitting the ball with the backhand, practice hitting the ball with the forehand, hitting the ball against the wall, training to hit balls in the air, training balls on the table, group training and rules of etiquette. Most of them agree on every point. (Interquartile range = 0.50 - 0.63)

4. Analysis results in Delphi data round 3

It is an analysis using the median value. and interquartile range as shown in the following tables 4-5. Meditation and mindfulness training by practicing Qigong consists of activities to practice Qigong to strengthen mindfulness and concentration in 4 poses, including meditation, and breathing exercises.

Table 4 Pattern of development of concentration and mindfulness with median, interquartile range.

Development of a meditation training model for the development of table tennis skills in primary school in the aspect of meditation and mindfulness.	Median	IQR.	Assessment level
1. Breath adjustment poses	5.00	0.50	Excellent
2. Chest stretching pose	5.00	0.50	Excellent
3. The Inika Soaring pose	5.00	0.50	Excellent
4. Sky and Shankaya breath pose	5.00	0.50	Excellent

From Table 4, it is found that meditation and mindfulness training by practicing Qigong consists of activities to practice Qigong to strengthen mindfulness and concentration in 4 poses of meditation practice and breathing practice that include: Breath adjustment poses, Chest stretching pose, Tha Inika Soaring Sky pose and Shankaya breath pose. Most had consistent opinions on every point. (Interquartile range = 0.00-0.50)

Table 5 Development of a meditation training model for the development of table tennis skills at the elementary level in table tennis skills.

Development of a meditation training model for the development of table tennis skills at the elementary level in table tennis skills.	Median	IQR.	Assessment level
1. Holding a racket	5.00	0.50	Excellence
2. Getting familiar with the table tennis ball	5.00	0.50	Excellence
3. Hitting the ball with the backhand	5.00	0.50	Excellence
4. Hitting the ball with the forehand	5.00	0.50	Excellence
5. Practicing bouncing the table tennis ball	5.00	0.50	Excellence
6. Practice hitting the ball with the backhand, forehand, and against the wall	4.00	0.50	Good
7. Training to hit balls in the air	5.00	0.50	Excellence
8. Training balls on the table	5.00	0.50	Excellence
9. Group training	5.00	0.50	Excellence
10. Rules of etiquette	5.00	0.50	Excellence

From Table 5, it is found that table tennis skills training Table tennis skill practice includes holding a racket, getting familiar with the table tennis ball, hitting the ball with the backhand, hitting the ball with the forehand, practicing bouncing the table tennis ball, practicing hitting the ball with the backhand, practice hitting the ball with the forehand, hitting the ball against the wall, training to hit balls in the air, training balls on the table, group training and rules of etiquette. Most of them agree on every point.



(Interquartile range = 0.00 - 0.50)

5. Results of analysis of meditation style and table tennis skills. From the meeting of 7 experts.

1. Developing a meditation practice style combined with table tennis skills. It's extremely good. The practice of Qigong is the basic culture of China that has a history of over 1000 years. Chinese people use it as the basis of their way of life in carrying out their daily activities. Therefore, its use with students at the elementary level is a suitable method guideline in building the foundation of Chinese culture also combined with table tennis skills. It has been a popular sport among Chinese people for a long time. China has many table tennis players. There are many at the world's leading level. Practicing correct table tennis skills, therefore, it creates a good foundation for youth athletes. That will lead to becoming a world champion in table tennis.

2. A model for applying mindfulness and concentration in table tennis. It gives Chinese athletes their own identity, especially at the youth level. The use of Qigong, which is a practice of body, mind, concentration, and breath, is admirable to be able to combine concepts and approaches so perfectly.

3. Experts have further presented that the development of this model will help promote Confidence for athletes in competition that must be faced with stress. Building confidence and identity of Chinese athletes who must travel to compete in every country around the world using Qigong as a basis.

4. Must admit that over the years Many athletes competing in competitions face pressure from many factors around them. Meditation with Qigong at the youth level will be one tool. To solve problems while competing or practicing. Including making other work have good concentration as well.

Discussion

From the results of the experiment, the researcher found that the results of the research are similar to the findings of previous researchers as follows:

The researcher was able to conclude that regular meditation practice would make students moral. Have maturity in terms of controlling emotions, knowing how to win and lose, and forgiving. It also gives students the spirit of being athletes. In addition to practicing meditation, it will also affect your table tennis practice. It also affects the quality of learning, making one able to concentrate and focus on the learning content well. Which similar research results to Bishop et al. (2004), the concept of mindfulness can be described in two aspects: (1) The characteristics of the state held in the control of attention, including external attitudes, acceptance of current activities, attention, etc.; (2) Focusing on and regulating the current experience, that is, using relevant technical means to pay attention to people's acquisition of new things, new knowledge acceptance, experience acquisition process, and continuous attention to the views and experiences formed by people in this process.

There are many studies indicating that table tennis is a sport that requires complex skills, but when there is regular practice, the skill becomes Combined with having talented teachers and teaching methods that are not boring. It can help your table tennis skills develop quickly. This has similar research results to Baer et al. (2003), who referred to the definitions of mindfulness in various academic circles and concluded a relatively complete statement, that is, what mindfulness describes is a kind of people who focus on their current activities. The process is a way of acceptance and non-judgment; Bishop and others believe that mindfulness describes a change in a psychological state, and people understand and master new things, and then adjust a series of changes in their self-state.

The research results that have been summarized show that the development of a training model for concentration, mindfulness, and table tennis skills of elementary school students will help promote better teaching and learning. Especially using meditation and mindfulness training with table tennis skills. It is a basic method of long-standing Chinese culture applied to international sports. Including meditation, mindfulness, breathing exercises, and breathing exercises, combined with sports skills in sequence with clear steps. Students learn from sub-skills from easy to difficult. The practice is repeated many times until it becomes a complete skill. As a result, students will have higher skills in table tennis. The format can be summarized as follows.

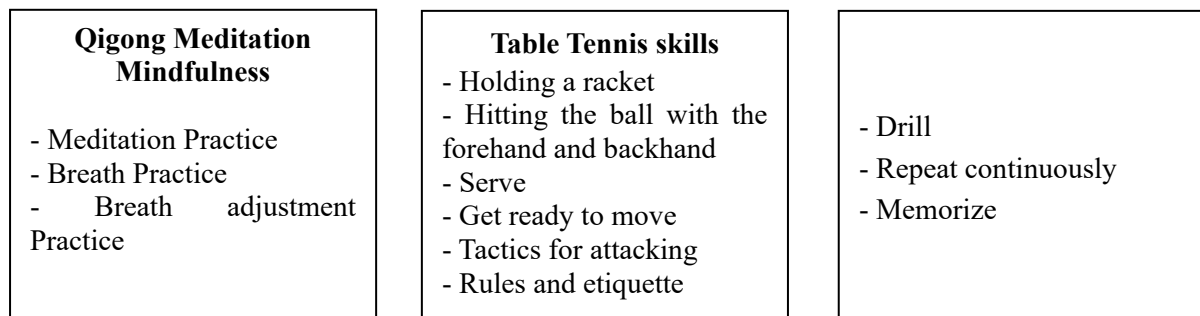


Figure 2: Model of Mindfulness Training to Improve Table Tennis Skills for Primary School Students in Guangzhou City

Recommendation

1. Application of research results

- 1.1 Training activities should be adjusted to be consistent with the abilities of the students.
- 1.2 Subgroup division the number of students should be taken into account. Table tennis is played in pairs, which must take into account various skills that must be combined with Qigong practice, concentration, mindfulness, and table tennis playing skills.
- 1.3 Training management There should be a trial to use it in its entirety.

2. Future Study

To Develop a Model of mindfulness training to improve table tennis skills for primary school students in Guangzhou city must be put into practice. So, it can be developed further.

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