



Development of Ba Duan Jin in General Physical Education for Female University Students

Zhang Li¹, Onemai Prapanbundit² and Nopporn Tasnaina³

Faculty of Sports Science and Technology, Bangkokthomburi University, Thailand

¹E-mail: 751602551@qq.com, ORCID ID: <https://orcid.org/0009-0002-1936-4763>

²E-mail: onemaday@gmail.com, ORCID ID: <https://orcid.org/0009-0009-2474-7735>

³E-mail: aipia2489@gmail.com, ORCID ID: <https://orcid.org/0009-0001-6086-0657>

Received 06/09/2024

Revised 09/09/2024

Accepted 09/10/2024

Abstract

Background and Aim: Higher education was responsible for cultivating talent cultivation, scientific research, social service, inheritance and innovation, and international exchange and cooperation. It was also a core principle and key work content that was jointly recognized by international organizations and the Chinese Ministry of Education. The opening of the Health Qigong Ba Duan Jin course at the core quality level, it did not only cultivated college students' dignified body shape and good movement coordination ability, so that college students' limbs become more upright, flexible, and soft, but also cultivated college students' firm will quality and comprehensive learning ability; in the design of the curriculum, it not only makes the physical education course curriculum richer, but also receives a better effect in cultivating the comprehensive ability of college students. These research objectives were 1) To develop Ba Duan Jin teaching program for general physical education courses of general physical education for female university students. 2) To identify the appropriate teaching methods and contents for teaching and learning Ba Duan Jin in general physical education for female university students. 3) To set an experiment on the developed Ba Duan Jin teaching program in general physical education for female university students, and to compare the effectiveness between the effective output of the developed Ba Duan Jin teaching program and the Traditional Health Qigong program on, 1) physical health 2) Ba Duan Jin skills and 3) general competencies.

Materials and Methods: The population of this research was first-year university students in the second semester of the academic year 2023 at Guilin Tourism University. They were registered in the Health Qigong in general physical education course of general education. The teaching program was developed and experimented with through a two-group pretest-posttest design with 30 students of first-year students in each group. The experimental group was taught with the developed Ba Duan Jin teaching program and the control group was taught with the traditional health qigong program. The research operated for 12 weeks, three days a week with one and a half hours a day. The paired t-test was used to analyze data within the group and the independent t-test was used to analyze data between groups.

Results: 1) Participated in the Ba Duan Jin teaching program could gain more significant improvement at a .05 level of significance than participating in the Traditional Health Qigong teaching program only on the Ba Duan Jin Skills and in a Physical pain of General Competency: But the other items of General Competency and All items in Physical fitness did not have any differences. 2) Subjects in the Experimental group who participated in the Ba Duan Jin teaching program accepted the teaching operation and process with a very high perception of the benefits and values of Ba Duan Jin, teaching method, and process and carried over the values of Ba Duan Jin for lifelong health exercise.

Conclusion: In general, physical education for university students both Ba Duan Jin and Health Qigong could improve Physical Fitness, Qigong Skill, and General Competency but the Ba Duan Jin teaching program could improve some few variables in General Competency more than Health Qigong, The Ba Duan Jin. The teaching program was very highly accepted perceived the value of exercise, operation, and process of the teaching program.

Keywords: Teaching Program; Ba Duan Jin; General Physical Education Course; University Students

Introduction

Health Qigong was based on traditional Chinese health science and was excavated, organized, and created in groups by experts in related fields organized by the China Health Qigong Management Center (State General Administration of Sport Fitness Qigong Management Center (2020) Emphasis on "three adjustments in one", that is, adjusting the body, adjusting the breath, and adjusting the mind. It is characterized by rich content, gentle and slow, easy to learn, graceful posture, flexible and changeable. At home and abroad, a lot of research has been done on the effects of Qigong on various systems and organs of the human body and related diseases, and certain research results have been achieved (Li & Lu, 2022).





Ba Duan Jin has been passed down from the Song Dynasty to the present and has a history of thousands of years. The term “Ba Duan Jin” was first found in the book *Yi Jianzhi Record of the Listener Selections of Chinese Supernatural Stories* written by Hongmai in the Southern Song Dynasty. According to Yi Jianzhi: “in the seventh year of the Zhenghe (1117 AD) dynasty, Li Siju, an officer titled the Qi Julang (who was in charge of recording the emperor's daily actions and state affairs), was very pleased to acquire the art by imitating the techniques performed by the practitioners who pursued the elixir of immortality, the postures of the bear hanging and bird stretching tried to sit in meditation at midnight, coordinate the respiration with the movements of pressing and rubbing, and practice the so-called Ba Duan Jin exercise. Ba Duan Jin had been spread since the Southern Song Dynasty. There were various styles of Ba Duan Jin recorded in history: the sitting vs the standing, the northern vs the southern, the quiescent vs the martial, and so on, among which the standing was the most popular in later years. At the end of the Qing Dynasty, people for the first time compiled the Ba Duan Jin into a complete routine, drew images, and put them into melodic mnemonics. Since then, the routine has been fixed. As a re-creation based on the traditional routine, the modern Ba Duan Jin had been widely promoted after scientific research and argumentation.

Long-term exercise can have a miraculous effect on preventing diseases and controlling the speed of disease. Its operation is simple and easy, and it does not have high requirements on environmental conditions, crowds, time, space, venues, facilities, and equipment; In terms of efficacy, it has long been proven to have unique fitness effects. By stretching the limbs and breathing in and out to adjust the mind, breath, and body, the body can be trained externally, and the essence and spirit can be cultivated internally. It has the functions of balancing yin and yang, harmonizing qi and blood, dredging the meridians, cultivating vitality, encouraging righteousness, and regulating smoothness.

Higher education was responsible for cultivating talent cultivation, scientific research, social service, inheritance and innovation, and international exchange and cooperation Li et al (2021). It was also a core principle and key work content that was jointly recognized by international organizations and the Chinese Ministry of Education. The opening of the Health Qigong Ba Duan Jin course at the core quality level, it did not only cultivated college students' dignified body shape and good movement coordination ability, so that college students' limbs become more upright, flexible, and soft, but also cultivated college students' firm will quality and comprehensive learning ability; in the design of the curriculum, it not only makes the physical education course curriculum richer but also receives a better effect in cultivating the comprehensive ability of college students. In terms of curriculum design, it not only makes the physical education program richer but also gets better results in cultivating the comprehensive ability of college students. I have found that through reviewing the literature of experts in the past 10 years, and by years of teaching and social service promotion training experience in colleges and universities, there is less information on the construction of the Health Qigong curriculum and teaching model in colleges and universities, and most of the physical education curriculum is based on the modern competitive sports programs, with a single method of teaching and insufficient heuristic guidance, and the majority of these programs were technically complex and require a great deal of attention from the institutions of higher learning, teaching methods, venues, equipment and audience groups. Equipment and audience groups are very demanding and if not properly organized, it is easy for some students to have a sense of fear and resistance, affecting the motivation and interest of students in learning Liu et al (2018). So, how to build a "learning, practicing, competition, teaching method" healthy Qigong-Ba Duan Jin teaching mode was an important topic of this study.

Guilin Tourism University was the main position of training tourism talents, over the years had been committed to cultivating students with recreation, fitness, coordination, organization, and communication skills, to achieve multi-talented, while enhancing the students' attitude of independent learning, establishing lifelong physical exercise ideas, mastery of knowledge and skills. So, through the visit and research on the teaching of Health Qigong course in Guilin tourism colleges and universities, we put forward an effective course plan: the length of one semester (12 weeks of 24 credit hours), the contents include (syllabus, class schedule, lesson plan, course analysis form), course objectives, classroom implementation plan, evaluation, and the establishment of scientific and reasonable Health Qigong course methods. We combined the teaching theory of the Health Qigong course with the teaching model of the Health Qigong course, adopted various teaching methods and





evaluations to cultivate students' practical ability, and tested the effectiveness of the Health Qigong course model proposed in this study on the physical and mental health of college students and their practical ability. The main purpose is to stimulate students' interest in learning, cultivate the idea of lifelong sports, and comprehensively improve college students' independent learning ability, innovation ability, teamwork ability, and knowledge application ability, so that they can become the real significance of Guilin Institute of Tourism Complex innovative tourism talents, is conducive to the implementation of the cultivation of practical multi-purpose talents oriented talent cultivation mode, and can provide reference for the revision work of the undergraduate talent cultivation program of the Guilin Tourism University to start the new round. It can provide a reference for Guilin Tourism University to start a new round of undergraduate revision of the talent training program.

Objectives

1. To develop a Ba Duan Jin teaching program for general physical education courses of general physical education for female university students.
2. To identify the appropriate teaching methods and contents for teaching and learning Ba Duan Jin in general physical education for female university students
3. To set an experiment on the developed Ba Duan Jin teaching program in general physical education for female university students, and to compare the effectiveness between the effective output of the developed Ba Duan Jin teaching program and the Traditional Health Qigong program on, 1) physical health 2) Ba Duan Jin skills and 3) general competencies

Literature Review

1. The background and cultural connotation of Health Qigong

Health Qigong is a traditional Chinese practice rooted in the concept of enhancing vitality and well-being through exercise and breathing techniques and has important cultural connotations. This ancient form of mind-body integration aims to improve the flow of life energy or Qi and is recognized in China and internationally for its health benefits (Tiwari et al., 2014). The technical practice, health wisdom, philosophical thoughts, and health concepts it contains are the precious wealth accumulated by the Chinese people in their daily lives for thousands of years. The cultural heritage and philosophical interpretation of health in Qigong have been comprehensively studied (Jin & Zhao, 2022). Among the "three adjustments", adjusting the body is the foundation, adjusting the breath is the intermediary, and adjusting the mind is the core, and the purpose of adjusting the mind is "longevity and invincibility" (Wang et al, 2010).

With the release of the "Interim Measures for the Administration of Health Qigong", Health Qigong has entered the public eye with a standardized and legalized appearance. Through the study of the origin, evolution, and development trend of Health Qigong, this practice can be better developed (Jiao, 2018). "Analysis of the Modern Physiological Mechanism of Traditional Theory of Health Qigong Journal" helps to clarify the ideas of Health Qigong and its philosophical, cultural, and biological foundations (Zhang, 2022). Health Qigong is regarded as one of the "phenomena as philosophy". Husserl gave "phenomenon" a special meaning, referring to the "essence" of various empirical categories in the world of consciousness, which is the result of consciousness activities (Si, 2011).

From the perspective of cultural confidence, the Health Qigong Ba Duan Jin has demonstrated significant health value and rich social value. Its inheritance and promotion can not only enhance people's sense of identity and pride in their own culture but also promote the inheritance and development of China's excellent traditional culture (Zhou & Shao, 2023).

2. The impact and application of Ba Duan Jin on physical and mental health

Health Qigong Ba Duan Jin is an ancient Chinese traditional exercise that combines body postures, breathing exercises, and relaxation techniques to improve overall health. This article reviews the effects of Qigong Ba Duan Jin on physical and mental health and explores its potential in health promotion and disease management.

Health Qigong Ba Duan Jin significantly improves physical health in a variety of ways. Studies have shown that regular practice of Qigong can improve muscle strength, respiratory function, and



overall health. Other studies have shown that Qigong can significantly improve vital capacity, sit-and-reach, and step-index in college students (Tan & Tan, 2020), and can improve cardiopulmonary function (Fei et al. 2007).

Zeng et al (2014) found that Qigong and Tai Chi had a positive effect on cancer-specific QOL, fatigue, immune function, and cortisol levels in cancer patients. The different practice forms from the static and dynamic perspectives of Qigong, excluding religious and cultural backgrounds. The authors believe that dynamic limb movement can promote health better than static movement. This study hopes that more research on Qigong practice methods and content can improve the quality of life of patients with cancer and those who are dying of age.

Impact on mental health

For college students, Ba Duan Jin shows significant effects in relieving psychological distress and depressive symptoms. Through long-term practice, Ba Duan Jin can improve college students' static balance and flexibility and promote mental health (Yang et al, 2012; Li, 2015). In addition, Qigong can also significantly improve psychological state and mood, such as reducing anger, fatigue, and depression.

The impact of Health Qigong Ba Duan Jin on the psychological and social adaptability of college students

The application of Health Qigong in college students also shows that it has a positive impact on mental health and social adaptability. Wan, (2011) explored the impact of the "Health Qigong Ba Duan Jin" practice on college students' body image, psychological happiness, psychological sadness, and psychological stress levels, and found that Ba Duan Jin practice can effectively improve college students' mental health.

Su, (2014) taught Ba Duan Jin to junior students of Fujian University of Traditional Chinese Medicine and found that it had a positive impact on students' mood and could improve their ability to deal with problems and challenges.

In summary, Health Qigong, as a comprehensive intervention measure for physical and mental health, has shown beneficial effects on people of different ages and health conditions.

3. The theory and implementation of teaching models

The Ministry of Education of China has put forward three work guidelines on how to better improve students' physical and mental health in future sports and education and find the points of convergence between the outstanding problems of the two, namely "combining sports and education - integrating sports and education - deepening the integration of sports and education. In the final sports and education integration education, more attention should be paid to the cultivation model of students' independent innovation, teamwork, courage to challenge, mutual assistance, and care (Li et al, 2020).

The construction of the teaching model should first establish the goal.

The core of education is to change behavioral patterns, including thinking, emotions, and actions. The goal of educational institutions is to promote positive changes in students in these aspects through a systematic educational process.

Yin (2002) pointed out that stimulating students' interest in learning and satisfying their desire to learn are important goals of physical education. Physical education not only imparts knowledge and skills and enhances students' physical fitness, but also integrates the five educations (morality, intelligence, physical fitness, beauty, and labor) and lifelong sports ideas into the teaching process, with education as the primary goal. Through an innovative teaching model that emphasizes learning interest and creative learning, physical education not only regards movement and emotion as a means to achieve teaching goals but also as a direct purpose. This method can not only stimulate students' interest in sports but also cultivate their self-sports ability and perfect personality, laying the foundation for lifelong sports.

From the above research, it can be seen that the goal of physical education not only includes the imparting of knowledge and skills but also emphasizes the stimulation of students' interests, the cultivation of lifelong sports, the development of creative thinking, and the joy of autonomous learning. These goals are of great significance for cultivating healthy and active students in sports activities and improving their comprehensive quality.

Teaching evaluation

Physical education course teaching evaluation plays an important role in improving teaching quality and students' physical fitness. This paper reviews several research papers and discusses the current situation, problems, and improvement methods of physical education course teaching evaluation. The main research findings are the imperfection of the evaluation index system: Many studies have pointed out that the current physical education evaluation index system is not complete, the evaluation subject is single, dominated by teachers and administrative departments, and lacks diversity (Liu, 2021). Han et al. 2022); Hong, Z. (2006)

Insufficient diversity of evaluation methods: Although the evaluation methods are diversified, there is less combination of information technology and cross-border evaluation methods, and the evaluation standards are highly homogenized, which fails to fully explain the essential problems of course evaluation (Han, G., et al. 2022); (Hong, 2006).

In summary, the evaluation of physical education course teaching requires a complete and more diversified indicator system, combined with information technology and cross-border evaluation methods to enhance student participation and feedback mechanisms. Through continuous evaluation and feedback, teaching methods can be continuously improved to promote the all-round development of students.

4. General Physical education for university students.

General education for university students was designed to provide a broad foundation of knowledge and skills that are essential for personal and professional development. Here are some key concepts and principles:

4.1 The Key Concepts of General Education could be summarized as follows:

1. Broad Knowledge Base: General education covers a wide range of disciplines, including humanities, social sciences, natural sciences, and mathematics. This ensures that students gain a well-rounded education.

2. Critical Thinking and Problem-Solving: Courses are designed to develop student's abilities to think critically, analyze information, and solve complex problems (University of The People, 2024)

3. Critical Thinking and Problem-Solving: Courses are designed to develop students' abilities to think critically, analyze information, and solve complex problems.

4. Communication Skills: Emphasis is placed on improving both written and oral communication skills, which are essential for success in any field.

5. Quantitative and Scientific Literacy: Students are taught to understand and apply quantitative and scientific methods, which are crucial for making informed decisions in a data-driven world.

6. Civic Engagement and Ethical Understanding: General education fosters an understanding of civic responsibilities and ethical behavior, preparing students to be responsible citizens.

5. Summary

Health Qigong, including practices like Ba Duan Jin, is deeply rooted in traditional Chinese culture and has been practiced for centuries as a means to promote physical and mental well-being. Ba Duan Jin, also known as the "Eight Pieces of Brocade," is one of the most popular forms of Health Qigong. It consists of 8 simple, yet highly effective exercises that involve stretching, breathing, and meditative movements designed to enhance the flow of qi (energy) in the body. Ba Duan Jin has significant positive effects on both physical and mental health. Physically, it improves flexibility, balance, cardiovascular health, and muscular strength. It is also effective in reducing the risk of chronic diseases, enhancing immune function, and promoting recovery from illness. Mentally, Ba Duan Jin has been found to reduce stress, anxiety, and depression, while improving mood, cognitive function, and overall psychological well-being. The practice fosters mindfulness and relaxation, which are key components of mental health.

The teaching of Ba Duan Jin emphasizes experiential learning, where students actively engage in practice to internalize the movements and concepts. Implementation of a teaching program often involves a step-by-step approach, starting with basic instruction on posture and breathing, and progressing to more complex sequences and applications. Teaching programs in physical education

aim to integrate traditional practices like Ba Duan Jin with modern pedagogical methods, ensuring that students not only learn the techniques but also understand the underlying principles and benefits.

Conceptual Framework

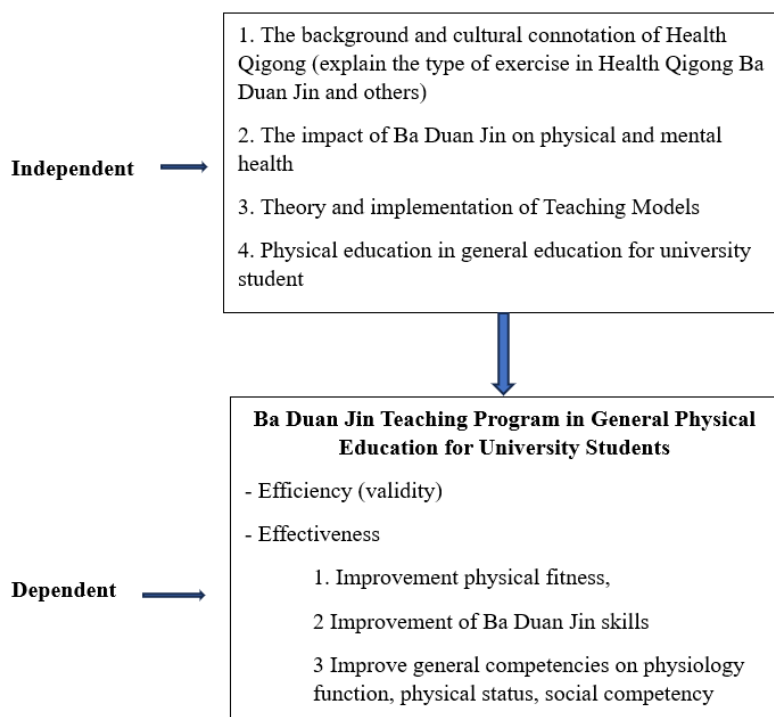


Figure 1 Conceptual Framework

Methodology

Population: The population of this research was 180 first-year university students in the second semester of the academic year 2023 of Guilin Tourism University who were selected to study physical education (Health Qigong) in general education.

Sample: The subjects for the experiment to find the effectiveness of the developed teaching program on Ba Duan Jin in physical education for the general education of university students were 60 first-year university students, who registered Health Qigong on physical education in general education. They were screened by the SF-36 Health Scale, then through a systematic sampling method, 60 students were divided into two groups, and 30 students from each group were then drawn into an experimental group and a control group.

Participants: 1. Experts for IOC: Five experts in the field of Health Qigong (management and teaching groups) who had national-level referees, deputy senior titles or above, were selected by using the purposive sampling method, to evaluate the questionnaires by using the index of Item-Objective Congruence (IOC).

Research Instruments

1. Questionnaire to survey the problems, interests, and appreciation of the general physical education course (Health Qigong)

2. The SF-36 Health Scale

The SF-36 Health Scale was shorter, more flexible, easier to administer, had satisfactory reliability and validity, and had higher sensitivity than other quality-of-life scales.

3. National Student Physical Health Standards

The Chinese version of the "National Student Physical Health Standards" scoring standards were used to test physical fitness.



4. The Chinese Health Qigong 2021 version of the judging
The Chinese Health Qigong 2021 version of the judging method was used to conduct special skill tests and judgments on Health Qigong movement drills and movement quality.
5. The Ba Duan Jin Teaching in General Education for University Students was developed by a researcher.
6. Comprehensive test manuals, forms and test equipment.
7. The questionnaire for program evaluation which developed by the researcher

Data collection

1. A survey was conducted using Questionnaire Star to assess students' physiological functions, mental health, teaching design, overall abilities, and problems with learning physical education in general education. The questionnaire was distributed to 180 students.
2. Draft concepts of teaching program on Ba Duan Jin in physical education of general education for university students.
3. Expert record form with questionnaires distributed to 9 experts to evaluate and confirm the teaching methods, "learning, practice, competition, extracurricular activities" teaching design, evaluation system content, and test indicators for the teaching program on Ba Duan Jin in physical education for general education.
4. Find the validity of the teaching program by 5 experts to find the Index of Item Objective Congruence (IOC) and find $IOC = 0.86$
5. Try out the Ba Duan Jin Teaching Program in general Physical Education with 3 students and 9 students to correct the understanding of communication and operation of the teaching process.
6. Set the experiment of two group pretest-posttest design for 1.30 hours a day, 1 day a week, for 12 weeks.
7. Physical fitness test Ba Duan Jin skill test and SF 36 for general competency survey were conducted before the experiment and after 12 weeks of the experiment.

Data analysis

1. The survey questionnaire was analyzed by descriptive statistics: mean, standard deviation, and percent.
2. Expert interview was analyzed by content analysis.
3. Comparison of Physical fitness test within group by paired t-test and between-group by independent t-test
4. Comparison of Ba Duan Jin skill test within the group by paired t-test and between groups by independent t-test
5. Comparison of general competencies survey within group by paired t-test and between-group by independent t-test
6. Program evaluation analyzed by a descriptive statistic: mean, standard deviation, and percent.

Results

The researcher developed a questionnaire, there were 27 items, and 5 groups which were, 1) quality and adequate facility and venues, 2) teachers' competencies and observation, 3) students' learning, and 4) interest in physical education and sports. 5) suggestions. The questionnaires were distributed to 180 students and all were returned. The data analyzed showed that:

Table 1 The Students' Responses on Physical Education and Qigong at University

Item	Issue	\bar{x}	SD	Level
A	Facility and venues			
1.	The area of practice and equipment	2.59	.54	Moderate
2.	Adequacy of facility equipment and area for teaching and learning, practicing	2.88	.66	Moderate
3.	Adequacy of facility, equipment, and room for practice after class time.	2.76	.53	Moderate
4.	Convenient to use facility, equipment, and room	2.82	.58	Moderate



Item	Issue	\bar{x}	SD	Level
B	Teachers' Competencies and Observation			
1	Competencies of teachers in Qigong.	4.30	.74	high
2	Technique and method of teaching interesting to students	3.93	.75	high
3	Teachers devote time and effort to teaching and practice	3.36	.82	Moderate
4	Students satisfied grades in Physical education classes.	3.53	.81	high
5	The Physical education class motivates the student to participate in sports and exercise	3.44	.69	Moderate
C	Students and Learning in Health Qigong			
1	Students eager to join the Health Qigong class	4.25	.85	high
2	Most of the students had better skills after learning	4.12	.74	high
3	Most of the students are satisfied with their grades in Health Qigong	4.35	.74	high
4	The university should provide Ba Duan Jin in to Health Qigong Course for students	4.20	.75	high
5	Students will enroll in Ba Duan Jin if the university provides it	4.30	.53	high
6	The students could learn Qigong more if they want to learn	2.46	.89	low
D	The interest in learning Physical Education of Students			
1	Students are active and eager to participate in PE class	2.60	.44	moderate
2	Students usually join extracurricular activities	3.92	.72	high
The Students' Responses on the Physical Education and Qigong in University (Cont.)				
No	Issue	\bar{x}	SD	Level
3	Most of the students were good at sports skills	3.56	.51	high
4	Most of the students participate in sports activities in university and the community	2.98	.67	moderate
5	Students were interested in Physical education and wanted to learn in other classes or practice to be an athlete.	3.96	.90	high
6	The Physical education class motivates the student to participate in sports and exercise	3.44	.69	high
E	Suggestions			
1	The university should provide special projects to recruit students who are skillful in sports.	4.32	.57	high
2	University should provide coaches to train the students after school hours	4.29	.59	high
3	The school should organize an open health qigong and Ba Duan Jin competition	3.60	.53	high
4	The university should establish a Qigong club to support students and the public.	4.22	.62	high
5	The university should organize various levels of Qigong and sports activities learning courses for students	4.36	.56	high
6	The university should make a connection to outside community clubs, experts, and athletes for cooperative promotion in sports for health and sport for excellence.	4.08	.65	high

From table 1 can be found that: 1) The facility and venues: most of the responses from students were moderate in all 4 items. 2) The teachers' competencies and observation: they were high in three items and moderate in 2 items. 3) Students and Learning in Health Qigong: there were high on 5 items



and low on 1 item. 4) The interest in learning Physical Education of students: there was high on 4 items, and moderate on 2 items. 5) The suggestions: which were high in all 7 items.

1. The Develop Ba Duan Jin Program in Physical Education

Ba Duan Jin Teaching Program in Physical Education for General Education for University Students.

1.1 Course Plan

Course Title	Physical Education I (Healthy Qigong-Ba Duan Jin)				
Credit	1	Course category	General education required courses		
Total period	24	Theory hours	2	Practical hours	22
Students	First-year undergraduate students of non-physical education or sport majors				
Course starting unit	Outdoor Sports Academy				

1.2 The Nature, Purpose, and Activities of the Course

Category	Describe
Course status	This course is a general compulsory physical education course.
Course objectives	To enable students to initially master the basic fitness and health theoretical knowledge and basic techniques of Health Qigong exercise, Cultivate students' mental improvement, organizational discipline, and the spirit of unity and cooperation;
Course content	Health Qigong: Ba Duan Jin
Course tasks	Master the full set of Ba Duan Jin movement essentials and theoretical knowledge of health and fitness. Through learning, we promote traditional Chinese culture, cultivate students' national self-confidence and sense of responsibility, and comprehensively improve their physical fitness.

1.3 Contents and basic requirements of theoretical teaching and practical teaching

Chapter	Content	Knowledge points	Basic requirements/objectives
Chapter I Overview Of Health Qigong Exercises	1. Overview of Health Qigong Exercise 2. Development of Health Qigong Movement 3. The fitness value of Health Qigong	1. Fitness principles of Health Qigong 2. The fitness value of Health Qigong	1. Through the study of the Health Qigong overview, students can understand what the Health Qigong exercise is. Build new knowledge and understanding. 2. Understand the cultural background and historical development of Health Qigong
	1. Health Qigong: Ba Duan Jin Gong Method Origin and Origin 2. Characteristics of Health Qigong: Ba Duan Jin Gong method 3. Basics of Health Qigong: Ba Duan Jin Gong method	1. Features of Health Qigong: Ba Duan Jin Gong method 2. Basics of Health Qigong: Ba Duan Jin Gong method	1. Understand the origin of Ba Duan Jin exercises 2. Understand the characteristics of Ba Duan Jin exercises





Chapter	Content	Knowledge points	Basic requirements/objectives
Chapter II Ba Duan Jin basic techniques	1. Etiquette 2. Breathing style 3. Hand shape and step shape	1. Key points: Reverse abdominal breathing method; difficulty: (1) Cooperation of breathing and thoughts; (2) Cooperation and transformation of left and right hands	1. Understand the meaning and importance of etiquette 2. Master your breathing 3. Master the hand and step methods
Chapter III technical moves	Ba Duan Jin's technical movements, movement methods, key points, and functional functions	Key points: Movement methods and essentials of movements. Difficulty: control of the charm and rhythm of technical movements.	1. Master standard movements and be able to skillfully complete a full set of movements; 2. Develop a lifelong awareness of exercise
Chapter IV Teaching evaluation	1. Class attendance 2. Class performance; 3. Practical techniques: complete set of drills, explanation of individual movements; 4. Quality test	Conduct scientific and objective assessments of students.	Test students' mastery of skills, test students' psychological quality and evaluate students' comprehensive abilities.

1.4 Course teaching methods and means

This course uses a variety of teaching methods. The determination of specific methods and means is based on the principle of being conducive to the learning of course content and achieving good teaching results. In classroom teaching, inspiration, discussion, student presentation, classroom review, and case teaching methods are widely used to guide students to think proactively and improve students' ability to analyze problems.

1.5 Course assessment methods and performance evaluation

This course was an examination subject, and the scores were evaluated on a hundred-point scale

Table 2 of evaluation Items and score

No.	Test	Items	Percent
1	Attendance	24 classes	10
2	Class Activities	3 assignments	10
3	Physical fitness	8 Items of test	30
4	Ba Duan Jin Skills	5 Items of test	30
5	General Competencies	3 Items of test	20
Total			100

2. The result of the experiment on Ba Duan Jin Implementation.

The result of program implementation by experimental research with two groups pretest-posttest design. The Experimental Group was Taught through the Ba Duan Jin Teaching Program (T1) and the Control Group was taught by traditional Health Qigong for 12 weeks, 3 days a week 2 hours a day.

Experimental group	O1	T ¹	O2
Control Group	O1	T ²	O2



Table 3 The comparison of physical fitness at the pretest between the experimental group and the control group

No	Test	Exp. Group		Cont. group		t	p
		X	SD	X	SD		
1	Standing long jump (cm)	168.23	19.594	170.60	22.159	-0.438	0.66
2	Sprint 50 m (sec)	8.97	0.678	9.01	0.889	-0.180	0.85
3	Seated forward bend (Inch)	13.58	4.076	13.72	4.261	-1.688	0.15
4	Vital capacity (cc)	2451.93	347.940	2340.43	302.440	1.241	0.24
5	Sit-ups (rep)	27.27	10.580	29.97	14.124	-0.838	0.40
7	Balance on one foot (sec)	65.13	41.035	67.53	41.701	-1.689	0.50
8	Shuttle run (sec)	5.86	0.556	6.09	0.627	-1.467	0.14
9	Distant run (Min.)	248.13	19.342	250.47	19.560	-0.465	0.64

Table 3, shows that in the comparison of physical fitness at the pretest between the control group and the experimental group, there was no difference on all nine items of physical fitness tests ($p=0.15 - 0.85$)

Table 4 The Comparison of Pretest on Ba Duan Jin Skill Test between the experimental group and control group

No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Standing long jump (cm)	175.17	18.956	168.23	19.594	-11.09	0.01*
2	Sprint 50 meters (sec)	8.76	0.607	8.97	0.678	3.33	0.02*
3	Seated forward bend (Inch)	20.01	4.671	13.58	4.076	-11.01	0.01*
4	Vital capacity (cc)	2684.80	370.004	2451.93	347.940	-8.06	0.01*
5	Sit-ups (rep)	31.93	10.288	27.93	10.110	-10.49	0.01*
7	Balance on one foot (sec)	108.67	52.227	65.13	41.035	-10.77	0.01*
8	Shuttle run (sec)	5.60	0.603	5.86	0.556	3.59	0.01*
9	Distant run (Min.)	245.90	19.025	248.13	19.342	3.47	0.02*

Table 4, shows that in the comparison of Ba Duan Jin Skills at the pretest between the control group and the experimental group, there was no difference in Ba Duan Jin skills tests.

Table 5 Comparison of Pretest on General Competency Test between the experimental group and control group

No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Ba Duan Jin	35.2	7.05	36.2	6.55	-0.46	0.65

* $p<.05$ represents there had significant difference

Table 5, shows that in the comparison of the General Competency Test at the pretest between the control group and the experimental group, there was no difference in the General Competencies Test, except for Physical pain and Physiological function which were significantly different at .05

Table 6 The Comparison of Pretest and Posttest on Physical Fitness Test Within the Experimental Group

No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
1	General Health	15.77	2.82	15.57	2.87	0.272	0.78
2	Physiological function	24.97	3.00	27.23	2.36	-3.253	0.02*
3	Physical status	6.43	1.50	6.97	1.38	-1.434	0.15



No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
4	Physical pain	8.51	1.17	9.17	1.39	-1.982	0.05*
5	Emotional Function	4.47	1.28	4.93	1.26	-1.425	0.16
6	Social Function	7.37	1.40	7.63	1.25	-0.779	0.43
7	Vitality	15.47	2.84	15.30	3.20	0.214	0.83
8	Mental Health	20.40	3.54	21.03	3.59	-0.688	0.49

*p<.05 represents there had significant difference

Table 6, shows that experimental group, the posttest on physical fitness tests was significantly higher than at the pretest in all 9 items, this means that the Ba Duan Jin teaching program could improve the physical fitness of university students.

Table 7 The Comparison of Pretest and Posttest on Ba Duan Jin Skill Test Within the Experimental Group

No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Ba Duan Jin	77.50	5.72	36.2	6.48	-74.2	0.01*

*p<.05 represents there had significant difference

Table 7, shows that in the experimental group, the posttest on the Ba Duan Jin Skills test was significantly higher than the pretest,

Table 8 The Comparison of Pretest and Posttest on General Competency Test Within the Experimental Group

No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
1	General Health	19.43	2.873	15.77	2.825	-6.83	.01*
2	Physiological function	28.43	1.612	24.97	3.000	-8.05	.01*
3	Physical status	7.60	0.724	6.43	1.501	-4.51	.01*
4	Physical pain	10.57	0.544	8.51	1.167	-11.38	.01*
5	Emotional Function	5.77	0.504	4.47	1.279	-6.04	.01*
6	Social Function	8.33	1.398	7.37	1.402	-3.38	.02*
7	Vitality	18.17	2.588	15.47	2.837	-4.52	.01*
8	Mental Health	22.90	3.356	20.40	3.539	-4.15	.01*

*p<.05 represents there had significant difference

From Table 8, the experimental group showed that the posttest on General Competency was significantly higher than at the pretest in all nine items.

Table 9 The Comparison of Pretest and Posttest on Physical Fitness Test Within Control Group

No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Standing long jump (cm)	174.33	22.051	170.60	22.159	-10.80	.01*
2	Sprint 50 meters (sec)	8.80	0.808	9.01	0.889	3.04	.05*
3	Seated forward bend (Inch)	18.51	5.120	15.72	4.261	-9.17	.01*
4	Vital capacity (cc)	2510.67	427.107	2240.43	382.440	-11.89	.01*
5	Sit-ups (rep)	34.08	10.060	33.65	11.099	-1.29	.21
6	Balance on one foot (sec)	107.40	55.351	97.53	51.701	-2.06	.45
7	Shuttle run (sec)	5.59	0.448	6.09	0.627	5.87	.01*



No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
8	Distant run (Min.)	249.90	19.725	250.47	19.560	1.48	.15*

*p<.05 represents there had significant difference

Table 9 showed that, in the control group, the posttest on physical fitness was significantly higher than at the pretest in 6 items: Standing long jump (cm), Sprint 50 meters (sec), Seated forward bend (Inch), Vital capacity (cc), 10 meters (Min) and Distant run (Min.), but not significantly different on Sit-ups (rep) and Balance on one foot (sec).

Table 10 Comparison of Pretest and Posttest on Ba Duan Jin Skill Test Within Control Group

No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Ba Duan Jin	77.50	5.72	36.2	6.48	-74.2	.01*

*p<.05 represents there had significant difference

Table 10 shows that, in the control group, the posttest on Ba Duan Jin's Skills was significantly higher than at the pretest.

Table 11 Comparison of Pretest and Posttest on General Competency Test within the Control Group

No	Test	Posttest		Pretest		t	p
		\bar{x}	SD	\bar{x}	SD		
1	General Health	19.33	3.427	15.57	2.873	-10.26	.01*
2	Physiological function	28.83	1.341	27.23	2.359	-5.76	.01*
3	Physical status	7.43	1.006	6.97	1.377	-2.31	.03*
4	Physical pain	9.73	1.407	9.17	1.390	-2.40	.02*
5	Emotional Function	5.57	0.898	4.93	1.258	-3.47	.02*
6	Social Function	8.87	1.224	7.63	1.245	-5.29	.01*
7	Vitality	18.30	3.334	15.30	3.196	-8.94	.01*
8	Mental Health	22.80	3.347	21.03	3.586	-4.51	.01*

*p<.05 represents there had significant difference

Table 11 showed that, in the control group, the posttest on physical fitness was significantly higher than at the pretest in all 9 items.

Table 12 Comparison of Posttest on Physical Fitness Test between Experimental Group and Control Group

No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Ba Duan Jin	86.5	5.28	77.5	5.72	6.36	.01*

Table 12 showed that in the posttest on physical fitness was no significant difference between the experimental group and control group in all 9 items.

Table 13 Comparison of Posttest on Ba Duan Jin Skill Test between Experimental group and Control group

No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
1	General Health	19.43	0.5245	19.33	0.6258	0.122	.90
2	Physiological function	28.43	0.2943	28.83	0.2449	-1.045	.30



No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
3	Physical status	7.60	0.1322	7.43	0.1837	0.736	.46
4	Physical pain	10.57	0.0992	9.73	0.2568	3.027	.04*
5	Emotional Function	5.77	0.0920	5.57	0.1639	1.064	.29
6	Social Function	8.33	0.2552	8.87	0.2235	-1.572	.12
7	Vitality	18.17	0.4724	18.30	0.6087	-0.173	.86
8	Mental Health	22.90	0.6128	22.80	0.6110	0.116	.90

*p<.05 represents there had significant difference

Table 13 shows that the posttest on Ba Duan Jin was significantly different between the experimental group and the control group.

Table 14 Comparison of Posttest on General Competency Test between Experimental group and Control group

No	Test	Exp. Group		Cont. group		t	p
		\bar{x}	SD	\bar{x}	SD		
1	Standing long jump (cm)	175.67	18.898	174.20	22.018	0.277	.78
2	Sprint 50 m (sec)	8.73	0.671	8.86	0.820	-0.638	.52
3	Seated forward bend (Inch)	19.35	4.443	18.82	4.560	0.456	.65
4	Vital capacity (cc)	2731.47	394.200	2510.67	427.107	2.081	.04
5	Sit-ups (rep)	31.23	10.808	30.53	13.214	0.225	.82
7	Balancing on one foot (sec)	116.00	67.995	107.40	55.351	0.537	.59
8	Shuttle run (sec)	5.53	0.445	5.59	0.448	-0.518	.60
9	Distant run (Min.)	245.90	19.025	249.90	19.725	-0.799	.42

*p<.05 represents there had significant difference

Table 14 showed that the post-test on General Competency was not significantly different between the experimental group and control group at .05 in 7 items on General Health, Physiological function, Physical status, Emotional Function, Social Function Vitality, and Mental Health but significantly different in Physical pain.

3. The Evaluation of Training Program

After ending of the experiment, the researcher collected the perception on the evaluation of the Ba Duan Jin training program by sending questionnaires to subjects who participated in the experiment.

Table 15 Conclusion of Program Evaluation by 30 Subjects Who Participated in the Experimental Group

No	Issues	\bar{x}	SD	Level of result
1	Do you like to learn physical education class	4.14	0.67	High
2	You know well about (Ba Duan Jin) before choosing this course	1.50	0.51	Very low
3	This Ba Duan Jin Course made you relieve from stress	4.47	0.63	High
4	Ba Duan Jin could be useful for your lifelong physical exercise activity	4.83	0.38	Very high
5	Do you like the current teaching method	4.80	0.41	Very high
6	Teachers integrated teaching methods to improve your emotions, attitudes, values, and physical and health skills	4.87	0.35	Very high
7	The teacher paid attention to the personality differences of the students	4.80	0.41	Very high



No	Issues	\bar{x}	SD	Level of result
8	Ba Duan Jin Program improved your health concept	4.67	0.48	Very high
9	Ba Duan Jin Program improved your physical and mental health	4.93	0.25	Very high
10	Participating in competitions and Sports performances will help your comprehensive ability	4.97	0.18	Very high
11	Studying in the Ba Duan Jin Program could transfer effect to other subjects	4.73	0.52	Very high
12	Are you satisfied with the teaching method and process of the Ba Duan Jin Program	4.80	0.41	Very high
13	Are you satisfied with the evaluation method for the physical education of the Ba Duan Jin course	4.67	0.48	Very high
14	You gain more knowledge, skills, and attitude toward physical exercise and health from this course	4.90	0.31	Very high

Table 15, showed that the subjects in the experimental group responded to project evaluation in the:

1. Very High Perceived: 1) participating in competitions and Sports performances will help your comprehensive ability (4.97 ± 0.18), 2) Ba Duan Jin Program will improve your physical and mental health (4.93 ± 0.25), 3) Totally, you gain more knowledge, skills, and attitude toward the physical exercise and health from this course (4.90 ± 0.3), 4) Teachers integrated teaching method to improve your emotions, attitudes, values, and physical and health skills (4.87 ± 0.35), 5) Ba Duan Jin could be useful for your lifelong physical exercise activity (4.83 ± 0.38), 6) You like the current teaching method (4.80 ± 0.41), 7) Studying in Ba Duan Jin Program could transfer effect to other subjects (4.73 ± 0.52), 8) Ba Duan Jin Program improved your health concept (4.67 ± 0.48), 9) You satisfied to the evaluation method for physical education of Ba Duan Jin course (4.67 ± 0.48),

2. High Perceived: 1) This Ba Duan Jin Course made you relieve from stress (4.47 ± 0.63), 2) You like to learn physical education class (4.14 ± 0.67)

3. Very low Perceived: You know well about (Ba Duan Jin) before choosing this course (1.50 ± 0.51)

Summary

The research results on “Development of Ba Duan Jin Teaching Program in General Physical Education for University” were as follows:

1. Participating in both the Ba Duan Jin teaching program and the Traditional Health Qigong teaching program for 12 weeks could significantly improve Physical Fitness, Ba Duan Jin, and General Competencies at a .05 level of significance.

2. Participated in the Ba Duan Jin teaching program could gain more significant improvement at a .05 level of significance than participation in the Traditional Health Qigong teaching program only on the Ba Duan Jin Skills and in Physical pain of General Competency: But the other items of General Competency and all items in Physical fitness did not have differences

3. Subjects in the Experimental group who participated in the Ba Duan Jin teaching program accepted a very high perception of the benefits and values of Ba Duan Jin, teaching method, and process and carried over the values of Ba Duan Jin for lifelong health exercise.

Discussion

The Contemporary Research on the Health of University Women found that approximately 70% of female college students exercise less than three hours per week (Li & Zhang, 2022). This figure was far below the World Health Organization (WHO) recommendation of at least 150 minutes of moderate-intensity exercise per week. Ba Duan Jin was an exercise method that was very suitable for female university students. At the beginning of the 20th century, Ba Duan Jin was circulated among the public as a qigong fitness method and was regarded as an effective way to improve physical health and mental health. Moreover, Ba Duan Jin was a qigong exercise method that originated from Taoism,



which emphasizes the harmony and unity of the body and the spirit and pursues movement in stillness. Shang, (2022) compared the difference between broadcasting exercises and vertical Ba Duan Jin and summarized the characteristics of the latter's movements in "The Exercise Characteristics of Ba Duan Jin ". Zhou (2010) respectively explained the "seated eight brocade" and "vertical eight brocade" action and role.

Ba Duan Jin's exercise was a model of the Qigong exercise which has a long history and evolution. Ba Duan Jin's exercise model was useful in helping to strengthen muscles, increase balance ability, and improve cardiovascular fitness. In addition, it helps relieve stress and anxiety and improves mental health (Dharmakulsakti et al, 2024). Ba Duan Jin, also known as the 8 Pieces of Brocade, is a traditional Qigong practice consisting of eight distinct movements. Each movement is designed to improve health and well-being by stimulating the flow of Qi (energy) throughout the body. Here are the detailed teaching steps for each movement.

The movements are designed to be performed slowly and mindfully, focusing on the coordination of breath and movement for the regular practice can help improve flexibility, balance, and overall health. In the process of carrying out training, attention should be paid to regular training, to have a continuous line of training. Because "Ba Duan Jin" was a long-term training activity. It should create a continuous schedule to help students develop the habit of practicing. During the learning process, teachers need to emphasize breathing and meditation, guiding students to balance the body and mind during the practice. Give individualized instructions as a way to give students a better understanding of breathing and aligning body energy. Allow the students to conclude as they continue to experiment.

Recommendation

Application of the Research

1. This research was done on female subjects, so it should take this program for female university students. If one applies to male university students, he should carefully consider FITT principles.
2. The university should put Ba Duan Jin into general physical education because it proved by this research and others that Ba Duan Jin could improve physical fitness, mental health, and others in female university students as the other Health Qigong did.

For further research

1. Study widely and deeply on another group of subjects to promote the Ba Duan Jin among children, youth, and people to preserve the national tradition of intelligence.
2. Study various frequencies, intensities, and times to find the appropriate dose in various groups of subjects.

References

- Dharmakulsakti, P., Chailert, C., & Chairangka, S. (2024). Baduan Jin: Exercise for Older Adults. *Vajira Nursing Journal*, 26(1), 71–80.
- Fei H., Cheng, J, Xing, K.& Wang, H. (2007). A study on the effects of "Health Qigong - Six Character Technique" on the cardiopulmonary function of college students. *Journal of Jilin Institute of Physical Education*, (02), 67-68.
- Han, G., Zhu, C., & Cui, J. (2022). *Review Curriculum Evaluation of Physical Education Specialty Under the Perspective of Teacher Training Certification*. *International Journal of Physical Activity and Health*.
- Hong, Z. (2006). *Exploration of Issues in Physical Education Teaching Evaluation*. *Journal of Henan Institute of Education*.
- Jiao, X. (2018). Historical origin and evolution of Health Qigong in China. *Journal of Heihe College*, 10, 189-190.
- Jin, Y, & Zhao, Q. (2022). 20 years of research on health qigong culture: trajectory, logic and prospects. *Journal of Nanjing Institute of Physical Education*, 4, 71-80.
- Li, A., Lv, W., Qi, C., Jian, D., & Wang, X. (2020). Concept·Method·Path: Theoretical interpretation and practical discussion of the integration of sports and education - Review of the academic





- seminar on "Integration of Sports and Education: Concept·Method·Path". *Journal of Wuhan Institute of Physical Education*, 54(7), 5-12.
- Li, R. & Lu, B. (2022). Research progress on the effects of Health Qigong on human physical and mental health. *Chinese Journal of Gerontology*, 18, 4638-4644.
- Li, X., & Zhang, J. (2022). *Research on Evaluation of Physical Education Teaching in Colleges and Universities Based on the "Evaluation-Feed 后" Mechanism*. *Frontiers in Educational Research*.
- Li, Z., Liu, M. & Zhao, Y. (2021). Curriculum education: Ideological and political characteristics, difficulties and coping strategies of college sports major courses. *Journal of Shenyang Institute of Physical Education*, 40(3), 18-24.
- Liu, C. & Li, Z. (2022). A new species of the genus *Pseudococcus* (Hymenoptera, Staphylinidae). Study on the Communication Path of Health Qigong under the Perspective of "Healthy China" (pp. 37-38).
- Liu, M., Li, Z., Deng, X., Huang, Q., Xu, T. & Ai, C. (2018). *The Effects of Ba Duan Jin on Clinical Rehabilitation of Patients with Primary Insomnia and Anxiety*. *World Journal of Integrated Traditional and Western Medicine*, 4, 563-570.
- Liu, S. (2021). *Evaluation of Physical Education Teaching Based on Analytic Hierarchy Process*. *Int. J. Emerg. Technol. Learn.*, 16.
- Lleixà, T., González-Arévalo, C., & Braz-Vieira, M. (2016). Integrating key competencies in school physical education programs. *European Physical Education Review*, 22, 506-525.
- Shang, L. (2022). *An analysis of the integration of "teaching, practicing and competing" in the reform of physical education in schools*. *Sports Culture Guide* No.5 May 2022.
- Si, H. (2011). A phenomenological study from Daoyin, Qigong to Health Qigong. *Journal of Shanghai Institute of Physical Education*, 1, 92-94.
- State General Administration of Sport Fitness Qigong Management Center. (2020). *China Fitness Qigong Association. Health Qigong eight Jingong method source*. Fitness Qigong Management Center.
- Su, Y. (2014). *A preliminary study on the effects of Ba Duanjin on the mental health of junior college students in traditional Chinese medicine colleges and universities*. Doctoral dissertation, Fujian University of Traditional Chinese Medicine.
- Tan, Z. & Tan, Q. (2020). A study on the psychosomatic effects of Health Qigong Ba Duanjin on depressed college students. *Contemporary Sports Science and Technology*, 4, 182-185.
- Tiwari, A., Chan, C. L. W., Ho, R. T. H., Tsao, G. S., Deng, W., Hong, A., ... & Ma, J. L. C. (2014). *Effect of a qigong intervention program on telomerase activity and psychological stress in abused Chinese women*. A randomized.
- Wan, Y. (2011). The effects of "Health Qigong Ba Duan Jin" on the mental health of college students. *Journal of Beijing Sport University*, 12, 102-111.
- Wang, M., Si, H., & Yu, M. (2010). Research on the way of regulating the mind through health qigong. *Journal of Shandong Institute of Physical Education*, 9, 45-47.
- Wang, Z., Qiu, P. S. & Li, C. (2005). Exploring the Essential Characteristics of Chinese Health Qigong from the Flows of Guiding Diagrams and Health Maintenance Techniques. *Sports Science*, 7, 49-52.
- Yang, D., Su, M. & Zheng, F. (2012). A study on the effects of Health Qigong Yi Jin Jing on balance ability and flexibility quality of college students. *Sports Science and Technology*, 2, 81-85.
- Yin, Z. (2002). The New Century, the New Mode--A Little Understanding of Physical Education Teaching Methods. *Journal of Shanxi Institute of Education*, 2, 123-124.
- Yu, D. & Zhang, M. (2010). Discussion on the international promotion of Health Qigong and the construction of national image from the perspective of word-of-mouth communication. *Journal of Shanghai Institute of Physical Education*, (6), 73-77.
- Zeng, Y., Luo, T., Xie, H., Huang, M. & Andy, S. (2014). Health benefits of qigong or tai chi for cancer patients: a systematic review and meta-analyses. *Complementary therapies in medicine*, 22(1), 173-186.
- Zhang, G. (2022). Structure-deconstruction-mediation: a study on the innovation of Health Qigong teaching mode. *Journal of Yellow River Institute of Science and Technology*, 2, 89-92.





- Zhao, H. (2010). A study of physical education classroom teaching evaluation with CIPP model. *Journal of Hebei Normal University (Education Science Edition)*, 12, 95-98.
- Zhou, Y.& Shao, G. (2023). The contemporary value of Health Qigong Ba Duan Jin from the perspective of cultural confidence. (eds.) *Abstracts of the First Forum on the Inheritance and Development of Chinese Traditional Sports Culture - Written Communication (VI)*. School of Physical Education, Inner Mongolia Normal University. 102-103.

