

Exploration of Physical Education Teaching Design and Student Ability and Character Cultivation Based on Positive Psychological Influence

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Abstracts: Physical education is an educational process that cultivates people. In happy, lively, and rich physical education classroom, students can achieve significant development in moral character, intelligence, physical fitness, skills, interpersonal communication, and other aspects. Design of physical education curriculum teaching based on positive psychological influence applies positive psychological influence in the process of physical education teaching and constructs a correlation model between teaching content of physical education curriculum and the cultivation of students' quality, ability, and personality quality. Embed positive psychological influencing factors into the content of the physical education teaching section, use scientific process control theory for sports training to monitor and personalize student health data (optimal heart rate), and design innovative physical education curriculum teaching plans. Organic integration of physical education teaching content with the cultivation of students' abilities and personality qualities, followed by the design, process organization, and implementation of physical education teaching, is an innovative path for the future development of physical education teaching.

Keywords: Positive Psychology; Physical Education; Ability Development; Personality, Exploration.

1. RESEARCH ON BASIC THEORY OF POSITIVE PSYCHOLOGY

Positive can be understood as "constructive" or "positive", which comes from the Latin word "positum" and originally means "actual" or "potential". From its original meaning, positivity includes both the explicit positivity of individuals and the potential positivity within individuals. The concept of positivity was first systematically proposed in the field of psychology in 1958, when the renowned American psychologist Jahoda proposed the concept of "positive mental health" in a series of mental health books compiled by the United States Joint Committee on Mental Health at that time. Since then, the concept of positivity has been widely applied. The founder of positive psychology was the renowned contemporary American psychologist Martin E.P. Seligman. In 1997, when Seligman [1] served as the President of the American Psychological Association, his strong advocacy sparked a massive "positive" movement in the Western psychological community. The world-renowned psychological journals "American Psychologist" and "Journal of Humanistic Psychology" published positive psychology albums in 2000 and 2001, respectively, and the concept of positivity gradually gained a clear definition in the field of psychology.

Positive psychology is an important psychological force that emerged in the West at the end of the 20th century, mainly studying human virtues and potential with the goal of helping everyone achieve happiness. Positive psychology utilizes well-established psychological experimental and measurement methods to study positive aspects of human strength and virtues [2]. The research object of positive psychology is ordinary people, exploring how to solve common psychological problems and emphasizing the importance of helping ordinary people cultivate positive psychological qualities. The vast majority of the research subjects of positive psychology are adults, mainly in American society, to the extent that Cowen [3] et al. referred to positive psychology as the "world map in the eyes of New York adults". The value orientation of adult oriented research makes it difficult for positive psychology to objectively and fairly analyze the development process, pathways, and related influencing factors of individual positive outcomes.

Positive psychology focuses its research on the positive factors of individuals, advocating that psychology should start from the inherent, actual, and potential constructive forces, virtues, and virtues of individuals, and advocating a positive mindset to provide new interpretations of many psychological phenomena (including psychological problems) of individuals, In order to stimulate people's internal positive forces and excellent qualities, and use these positive forces and excellent qualities to help ordinary people or those with certain talents maximize their potential and achieve a good life [4].

The emergence of positive psychology research paradigm is not only a reaction to early negative psychology, but also a development and transcendence of negative psychology. It reflects the core value of contemporary psychology research to a certain extent. Psychologists have conducted a valuable experiment in which a baby born on the first day of life immediately cries when they hear the sad cries of another baby, showing obvious empathy. However, if their own crying is recorded and played to them, they do not respond to the recording of their own crying. This phenomenon has been verified in multiple related experimental studies [5].

Kennon M. Sheldon [6] and Laura King [6] believe that positive psychology is a science dedicated to the study of human development potential and virtues. This definition expresses essential characteristics of positive psychology.

Empirical research in positive psychology suggests that compared to ordinary people Those with positive attitudes have better social morality and social adaptability. They can face pressure, adversity, and losses more easily, and even face the most unfavorable social environment. They have greater flexibility and creativity when facing difficulties and challenges, and are always able to face them bravely and take effective measures to overcome them. They have good interpersonal relationships and need help when they need help When helping, they have full confidence in receiving help from friends, family, colleagues, and even society [7]. Psychologists conducted a long-term study on 650 psychological patients from the Veterans Administration in the United States, and found that patients with positive attitudes have relatively better physical health.

Positive psychology is committed to the positive qualities of human beings, which is not only a great respect and praise for human nature, but also a rational understanding of human society. There must be some form of life in humans that is superior to other forms of life. Positive psychology is a psychology that makes people happy, showcasing bright prospects, which is a better and easier to understand explanation for positive psychology.

Main viewpoints of positive psychology are:

(1) Psychology should consider helping everyone pursue happiness as its own value pursuit. The three tasks of psychology: (1) treating psychological disorders. (2) Help people's lives become happier and more fulfilling. (3) Explore and cultivate individuals with extraordinary talents. The foundation of society is always ordinary people. Ordinary people generally do not have mental illness problems, and of course, they are not extraordinary talents. However, only by making ordinary people happy can this society be considered a happy and harmonious society.

(2) Advocating an open and appreciative perspective on others (being good at seeing the positive aspects of others). Positive psychology advocates that psychology should view everyone with an open and appreciative perspective, emphasizing that when studying various psychological problems, psychology should also study the positive aspects of human beings, such as potential, motivation, and positive forces.

(3) Emphasize positive response to problems and gain positive meaning. Although problems themselves cannot add strength and excellent qualities to humanity, their emergence also provides an opportunity for humanity to showcase their excellent qualities and potential abilities. Positive psychology emphasizes that providing positive explanations or seeing positive aspects of a problem is more conducive to solving the problem itself. Positive understanding can fully mobilize a person's intelligence and overcome difficulties by cultivating positive forces and qualities.

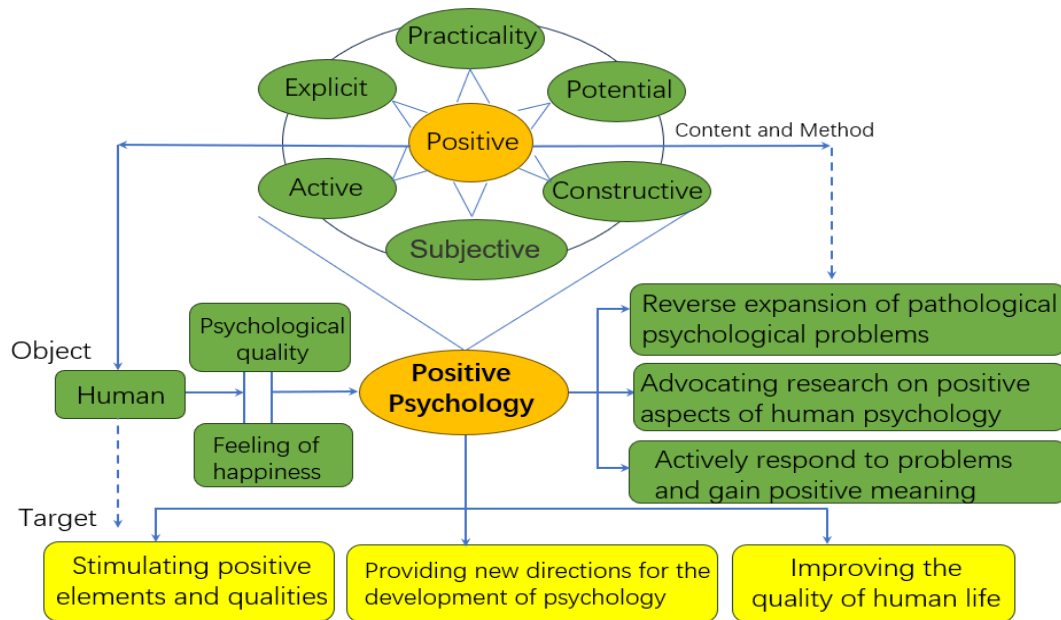


Fig. 1. Structure diagram of research objectives, research objects, and conceptual content in positive psychology.

In summary, main content of "positivity" in positive psychology mainly includes the following three aspects: (1) reverse research on individual pathological psychological problems in the early stage; (2) Advocating the study of positive aspects of the psychology of ordinary people; (3) Emphasize using a positive approach to provide appropriate explanations for psychological issues and gain positive meaning. In the new era, positive psychology is not a reverse thinking towards pathological psychological problems, but a value orientation that responds to real-life problems in a more proactive manner. It is itself positive, positive, practical, and meaningful. This positive psychological quality has become an important component of human nature in human evolution and development.

2. RELATIONSHIP BETWEEN POSITIVE PSYCHOLOGY AND PERSONALITY TRAITS

Research by Yue Lv [8] found that hypertensive patients have a significant tendency towards neuroticism, often feeling lonely, prone to anxiety, having large emotional responses, and poor control. Hypertensive type A individuals have characteristics such as sustained aggression, frequent sense of urgency, irritability, and impulsiveness, making them recognized as unique risk factors for coronary heart disease.

Xinhua Shen [9] have demonstrated that psychological and social factors have an impact on immunity. There are complex interactions between behavior, brain, and immune system. Positive coping can improve immune function, while negative coping can suppress immune function.

Yongsheng Tong [10] used QZPS to assess personality traits in 91 schizophrenia patients and 92 healthy control subjects. It was found that patients with schizophrenia scored lower than the healthy control group in the six personality traits of "gregariousness", "altruism", "emphasis on emotions", "rigor", "self-control", and "leniency".

At present, the definition of mental health is the subjective well-being of individuals manifested by self-harmony based on a good physiological state and harmony with the external social environment, including the absence of psychosomatic symptoms and the presence of positive psychological qualities [11].

According to the study of positive personality, there may be a corresponding relationship between the power of positive personality in humans and various psychological disorders. Certain specific positive personality forces can be used to prevent, alleviate, or treat specific psychological disorders, and the lack of certain positive personality forces is the basis for developing psychological disorders. Psychologists have now discovered that many human forces can serve as buffers against and alleviate mental illness. Such as courage, confidence, optimism,

interpersonal skills, beliefs, sense of responsibility, hope, loyalty, perseverance, adaptability, insight, etc [12].

Researching by Artistico [13] has shown that extroversion, optimism, self-esteem, self-efficacy, and other factors are associated with good subjective and objective health states. Individuals with such personality traits report fewer disease symptoms. Having more healthy behaviors.

Hong Cui [14] studied the relationship between the seven major personality traits in China and physical and mental health, and found that optimism, decisiveness, resilience, confidence, integrity, and patience are all significantly negatively correlated with at least one factor of SCL-90. This indicates that these personality traits can reduce the likelihood of individuals experiencing psychosomatic symptoms. It is beneficial for maintaining mental and physical health. At present, they propose to establish a "tolerance" personality model for Chinese people, believing that tolerance is an important personality trait that can resist stress and protect individuals from harm in high-intensity stress life situations.

A positive personality helps individuals adopt more effective coping strategies, thereby better responding to various stress situations in life [15], promoting healthy behavior, and preventing the occurrence of psychosomatic diseases. For example, optimistic and strong personality traits can buffer the negative effects of stress on physical and mental health. When facing pressure, optimistic and strong individuals tend to adopt positive and effective coping strategies, such as problem oriented coping strategies, actively seeking social support, and effectively alleviating stress.

Maddi [16] found that resilience is negatively correlated with factors such as anxiety, depression, and somatization interpersonal sensitivity in the symptom self-assessment questionnaire.

Research by American scholars suggests that positive qualities are highly correlated with whether military personnel can achieve military success. Duckworth's research suggests that the "grit" in positive qualities is significantly positively correlated with the performance of basic training for West Point military freshmen. The grit test is more accurate than any other test in predicting which freshmen will complete difficult summer training and which will be eliminated, and is superior to a combination of other tests [17]. The quality of perseverance also has a positive predictive effect on the selection of excellent officers or special forces.

Table 1 Mean (M) and Standard Deviation (SD) of Initial Data for Psychosomatic Health Elements (SCL-90 Symptom Factors)

(Data source: Hong Cui [14])

	Somatization	Compulsive Impulse	Interpersonal Sensitivity	Depressed	Anxiety	Hostile Anger	Terror	Paranoia	Psychiatric
M	0.6	0.7	0.7	0.7	0.6	0.5	0.6	0.7	0.6
SD	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.6

Table 2 Regression analysis of psychosomatic symptoms (SCL-90 symptom factor) and personality quality β value

(Data source: Hong Cui [14])

Physical and Mental Symptom Factors	Coefficient (R ²)	Regression Analysis of Physical and Mental Symptom Factors and Personality Quality Factors β Value				
Somatization	0.2	Optimistic -0.2	Rigorous 0.2	Self-confident -0.1	Self-control 0.1	Decisiveness -0.1
Compulsive Impulse	0.1	Optimistic -0.3	Rigorous 0.1	Aloof -0.2	Self-control 0.1	Tenacity 0.2
Interpersonal Sensitivity	0.1	Optimistic -0.3	Rigorous 0.2	Aloof -0.1	Self-control 0.1	Tenacity 0.1
Depressed	0.1	Optimistic -0.3	Rigorous 0.1	Enthusiasm -0.1	Self-control 0.1	Tenacity 0.1

Anxiety	0.1	Optimistic	Rigorous	Steady	Self-confident	Self-confident
		-0.3	0.1	-0.1	-0.1	-0.1
Hostile Anger	0.1	Optimistic	Rigorous	Patience	Self-control	Steady
		-0.17	0.1	-0.1	-0.2	-0.2
Terror	0.2	Optimistic	Rigorous	Self-confident	Self-control	Enthusiasm
		-0.3	0.14	-0.2	0.1	-0.1
Paranoia	0.1	Optimistic	Rigorous	Honest	Self-control	Tenacity
		-0.2	0.2	-0.1	0.2	0.1
Psychiatric	0.2	Optimistic	Rigorous	Decisiveness	Self-control	Tenacity
		-0.3	-0.2	-0.1	0.1	-0.2
Total score	0.2	Optimistic	Rigorous	Honest	Self-control	Tenacity
		-0.3	0.2	-0.1	0.1	-0.2

In summary, there is close relationship between positive psychology and excellent personality traits, and the relationship between personality traits corresponding to SCL-90 physical and mental symptom factors is clearer (See Tables 1 and Tables 2). Personality traits can predict a person's future career development and achievements, and play an important value role in cognitive, emotional, and behavioral disorders. The theory of positive psychology is in line with the needs of building a harmonious society today. We should attach importance to the application of positive psychology in education, management, and clinical psychological diagnosis and treatment, and strive to build a healthy and positive social mechanism system, guide and help social people pursue positivity, and cultivate positive personality traits (courage, optimism, resilience, cooperation, honesty, enthusiasm, confidence, etc.).

3. RELATIONSHIP BETWEEN POSITIVE PSYCHOLOGY AND PHYSICAL HEALTH

Positive psychology and health psychology have many similarities. Over the past few decades of empirical research, health psychologists have consistently believed that negative emotions can make us sick, while positive emotions can be beneficial. Stress, anger, resentment, anxiety, and worry have potential and adverse effects on health, involving the nervous system, endocrine system, and immune system. Stress and negative emotions can inhibit the function of the human immune system and reduce the body's ability to fight diseases. Related studies have found that positive emotions have the same significant impact as negative emotions, but their direction of action is opposite. When negative emotions weaken health, positive emotions help to restore or maintain physical and mental health. Positive emotions seem to enhance physical and mental health and social adaptation processes, improving a person's health quality, social skills, and intellectual function.

Impact of positive psychology on sports is mainly focused on process experience, providing participants with a good sense of experience. Such sports have excellent "viscosity", making participants particularly willing to continue participating and experiencing happiness. By using physical exercise as a medium for psychological and emotional regulation, combining psychological counseling technology with physical education teaching methods, combining happy sports with sports training theory, and supplementing it with teacher psychological guidance language, we can enrich the teaching content of physical education courses, increase teacher-student interaction content, and improve classroom teaching effectiveness. Sports with positive psychological impact have a high demand for process control. Students' individual information, warm-up exercises, technical teaching, exercise load, interval time, process control, motivation and guidance, atmosphere regulation, and other aspects must be accurately implemented and deeply implemented. In addition, there are also high requirements for teachers' professional skills and literacy during the implementation process.

American psychologists Seligman [18] found that positive psychological practice can significantly improve adult emotional experiences, reduce depression and anxiety. The Penn Resilience Program (PRP) at the University of Pennsylvania is a group intervention course designed by Seligman's research group specifically for teenagers, focusing on guiding students' cognitive behavior and improving social problem-solving skills. The results have shown that PRP can prevent depression and anxiety, and the effect is long-lasting. Two years or even longer after participating in PRP, students still maintain resilience to resist depression and anxiety.

Modern psychosomatic medicine research has proven that mutual influence of the nervous system, endocrine system, and immune system transforms psychological factors into physiological ones. Personality influences an individual's health status through behavior. There is a highly significant negative correlation between physical exercise and personal and academic worries. It is important and necessary for college students to use physical exercise methods to regulate psychological stress. Positive healthy behavior can keep individuals away from diseases, while unhealthy behavior increases the risk of developing diseases, and personality variables such as neuroticism and hostility also affect the implementation of people's healthy behavior [19].

Physical and mental health of students is one of the issues highly concerned and valued by the whole society, and it is also a common educational problem faced by countries around the world. How to improve the physical health of college students in physical education teaching has become a top priority in school physical education research. At present, there are many problems in the teaching of health knowledge and the improvement of mental health quality in school physical education: a shortage of professional talents, insufficient connection between classroom teaching and campus sports culture construction, and difficulty in forming a synergy between in class and extracurricular exercises. In sports, having physical education teachers or coaches provide on-site guidance and supervision, supplemented by psychological motivational guidance, will help students improve their self-efficacy, improve the quality and effectiveness of physical fitness or skill practice [20], [21]. In addition, anxiety, depression, and social phobia have even become common symptoms among college students and even teachers, directly leading to low learning efficiency. Health of students and teachers is worrying, requiring the attention and concern of the whole society. It requires all teachers and students to work together to find solutions and solutions.

4. EXPLORATION OF THE APPLICATION OF POSITIVE PSYCHOLOGY IN PHYSICAL EDUCATION TEACHING PRACTICE

Focusing on the cultivation goals of students' core literacy and sports literacy, the theory of positive psychology is embedded in physical education teaching content. Through means such as sports activities, skill learning, physical exercise, and sports competitions, the focus is on strengthening the design and method innovation of physical education teaching content and assisting in the construction of physical education courses in universities. Physical education is the process of cultivating and shaping people, establishing the guiding ideology of "health first", integrating the educational ideology of "cultivating virtue and nurturing people" into physical education classrooms, imparting knowledge, improving students' cognitive level of sports and health, elevating the ideology of physical education, enhancing the actual effectiveness of physical education, and making physical education a highly practical course with strong practicality. College physical education teaching needs to revolve around the cultivation goals of students' core literacy and physical literacy, embed positive psychology theory into physical education teaching content, use mathematical analysis methods, and explore the design and method innovation of physical education teaching content through sports activities, skill learning, physical exercise, sports competitions, and other means.

4.1 Research Ideas and Steps

Collect data on students' physical health, conduct statistical analysis of the data results, use expert interviews to explore the existing problems in physical education teaching in universities, assign values and quantify the research questions, and select typical representative problems in physical education curriculum teaching to focus on research. Clarify the content structure of physical education curriculum teaching, redistribute and design the exercise load of physical education curriculum based on the target tasks of skill teaching and physical exercise, and attempt to design a standardized, standardized, and highly practical teaching organization model. Based on the theory of positive psychology, the optimal organizational model for physical education classroom teaching and student ability cultivation is designed by combining student ability cultivation points (basic theory, character literacy, sports quality, sports skills, collaborative spirit, sports literacy, etc.). Refer to Figure 2 for details.

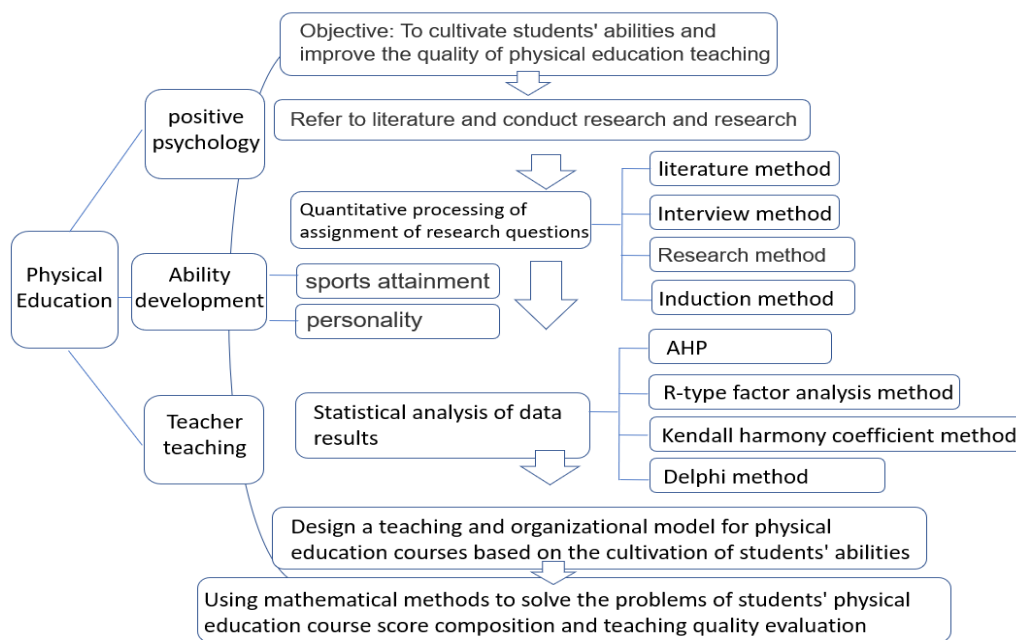


Fig. 2. Schematic diagram of school physical education teaching work based on positive psychological influence.

Focusing on the cultivation goals of students' core literacy and sports literacy, the theory of positive psychology is embedded in sports teaching content, and mathematical analysis is used to explore the design and innovation of sports teaching content and methods through means such as sports activities, skill learning, physical exercise, and sports competitions. The specific steps are as follows: (1) Collect data on students' physical fitness and health, conduct statistical analysis of the data results, use expert interviews to explore the existing problems in college physical education teaching, assign quantitative values to the research questions, and select typical representative problems in physical education curriculum teaching to focus on research. (2) Clarify the content structure of physical education curriculum teaching, redistribute and design the exercise load of physical education curriculum based on the target tasks of skill teaching and physical exercise, and attempt to design a standardized, standardized, and highly practical teaching organization model. (3) Research on the evaluation of physical education teaching quality, with a focus on solving the composition of students' physical education course grades and monitoring of teaching quality, using scientific research methods such as Analytic Hierarchy Process and R-factor analysis to screen core elements from physical education teaching content. (4) Based on the theory of positive psychology, the optimal organizational model for physical education classroom teaching and student ability cultivation is designed by combining student ability cultivation points (basic theory, character literacy, sports quality, sports skills, collaborative spirit, sports literacy, etc.).

4.2 Correlation Between Physical Education Teaching Content and The Cultivation of Students' Abilities and Personality Traits

Table 3 Correlation between Student Ability Development and Teaching Content (Taking Boxing Special Courses as an Example)

N	Ability Development	Teaching chapters and Content		Association Strength
		Chapter	Content	
1	Health knowledge	Chapters 1, 2, 5, 6, 7	1. Basic theories of sports and knowledge of human health; 2. Sports interest.	H
2	Specialized theory	Chapters 3, 4	1. Basic theories, skills, and methods of boxing; 2. Rules for boxing competitions.	M
3	Practice	Chapters 5, 6, 7, 8	1. Basic sports skills in boxing; 2. Combination and application of fist techniques.	H

4	Communication	Chapters 5, 6, 7, 8	1. Noble sentiment and global perspective; 2. Ability to communicate and communicate across cultures	M
5	Sports Habits	Chapters 3, 4, 5, 6	1. Sports awareness and exercise habits; 2. Learning and adaptability.	M

Scientifically combining and distributing the teaching content of physical education courses to comprehensively develop students' abilities related to health knowledge, specialized theories, practical abilities, communication and communication, and habit cultivation. Taking boxing specialized courses as an example, it is necessary to cultivate students' noble sentiments, international perspectives, practical abilities, social skills, and lifelong sports awareness in the process of learning basic theories, techniques, and competition rules of boxing, Emphasis should be placed on enabling students to master general knowledge of sports and health, emphasizing the cultivation of students' skills and practical application abilities, stimulating their awareness of loving and actively participating in sports, and cultivating physical exercise habits.

Table 4 Correlation between physical education teaching content and cultivation of students' personality traits

I	Teaching content	Student Ability Development Points	Personality Quality Cultivation Points	Association Strength
	1 Basic Theory of Boxing	Specialized theory	Courage	H
	1.1 rview of Boxing	Theoretical literacy	Enterprising	M
	1.2 Characteristics, Value, and Development History of Boxing Sports	Communication	Enthusiasm	M
	1.3 Training Content, Methods, and Methods of Boxing	Lifelong learning	Optimistic	M
	2 Rules of Boxing Competition	Specialized theory	Rigorous	H
	2.1 The level of boxing competition (amateur and professional)	Theoretical literacy	Fair	H
	2.2 Scoring and Victory Determination	Communication	Decisiveness	M
	2.3 Rules for Falling and Counting Seconds	practical ability	Self-control	L
	3 Sports (Boxing) and Health	Health knowledge	Optimistic	H
	3.1 Sports and Health, Nutrition and Health, Behavior and Health	Theoretical literacy	Rigorous	M
	3.2 Sports and Mental Health	Communication	Self-control	M
	3.3 Physical Fitness Testing and Extracurricular Physical Exercise for College Students	Sports habits	Tenacity	M
	3.4 The Value and Significance of Boxing in Improving Health	Specialized knowledge	optimistic	H
	4 Sports and Students' Core Literacy	Theoretical literacy	enthusiasm	L
	4.1 The connotation of students' core literacy	Communication	Integrity	M
	4.2 The relationship between sports and core competencies	Sports habits	Self-control	M
	4.3 Concept of independent development and healthy life	Specialized Skills	Decisiveness	H
	4.4 Value and Significance of Boxing in Cultivating Students' Core Literacy	Practical ability	Tenacity	H
	5 Boxing Clash and Basic Footwork	Communication	Self-control	M
	5.1 Boxing Brace (Preparation Pose)	Lifelong learning	Self-confidence	M
	5.2 Basic boxing footwork (forward, backward, "meter" step, "antelope jump", "butterfly step")	Specialized theory	Decisive	H
	5.3 Boxing Footwork Combination (One Step, One Step, Two Step, One Step, Two Step "Antelope Jump")	Specialized	Optimistic	L
	6 Offensive Techniques in Boxing	Specialized	Tenacity	M
	6.1 Straight Fist Technique			
	6.2 Swinging techniques			

6.3 Hook Fist Technique	Skills	Self-confidence	M
6.4 Combination Fist Techniques (Left Right Straight Fist Combination, Free Combination of Fist Techniques)	Application ability		
	Communication and exchange		
7 Defense Techniques in Boxing	Specialized theory	Rigorous	M
7.1 Blocking technology	Specialized	Decisive	H
7.2 Dodge technology	Skills	Tenacity	H
7.3 Shake Avoidance Technology	Practical ability	Self-confidence	M
7.4 Diving Technology	Communication		
8 Basic Tactics of Boxing	Specialized theory	Rigorous	M
8.1 Offensive Tactics	Specialized	Flexible	H
8.2 Defensive Tactics	Skills	Decisive	M
8.3 Counterattack Tactics	Practical ability	Tenacity	M
8.4 Tactics of stalemate	Communication		

Cultivating students' excellent personality traits is a top priority in school education, and school physical education teaching is duty-bound. From Table 2- The correlation between physical education teaching content and the cultivation of students' personality traits, it can be seen that the structure and content of school physical education teaching, the cultivation points of students' abilities, and personality traits do not exist in isolation. The content of physical education teaching needs to be organically integrated with the cultivation of students' abilities (theoretical foundation, specialized skills, practical ability, application ability, social ability, etc.), and the cultivation of students' excellent personality traits (such as enthusiasm, courage, enthusiasm, optimism, fairness, resilience, confidence, flexibility, decisiveness, etc.) needs to be organically integrated with the content of physical education teaching. While students' abilities are improved, their personal qualities are also constantly formed unconsciously. In the educational process of both in and out of class, explicit and implicit, attention should be paid to the correlation between teaching content and students' ability improvement and personality cultivation, in order to maximize the quality and effectiveness of school physical education teaching.

4.3 Physical Education Teaching Design and Process Monitoring Based on Positive Psychological Influence

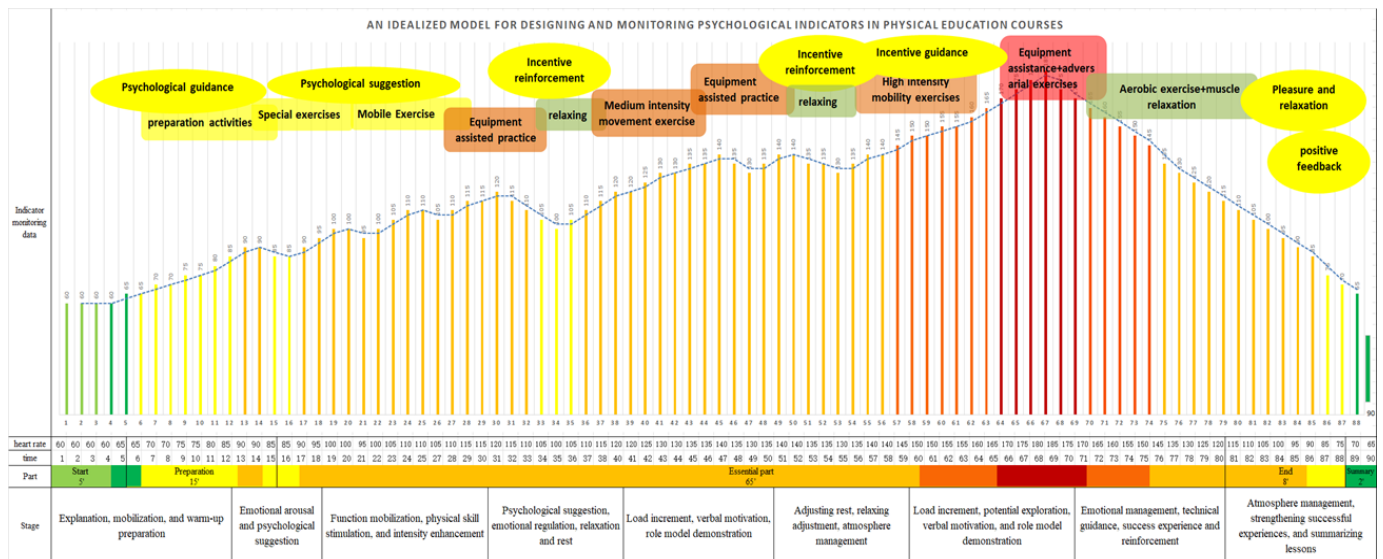


Figure 3: Process design and monitoring mode diagram of physical education curriculum with positive psychological impact

Taking fitness and exercise courses as an example, an idealized model of physical and psychological indicators for physical education courses is designed (see Figure 3 for details), with psychological stress reduction and exercise release as the main goals of fitness courses. Sports training ideas are integrated into fitness courses, physical

exercise is used as a medium for psychological and emotional regulation, psychological counseling technology is combined with physical education teaching methods, happy sports are combined with sports training theory, and teacher psychological guidance language is used, leading function of physical education teachers is further expanded, and the core content of physical education curriculum is reshaped.

4.4 Physical Education Performance Assessment and Evaluation

Content and form of physical education course performance assessment: Score = in class and out of class scores × 30% + physical fitness and specialized technical evaluation × 70%. Assessment content, format, and detailed score settings are shown in Table 5.

Table 5 Design of the Composition of the Total Score of the Course.

Content	In class and out of class (30%)		Physical fitness and specialized skills (70%)	
	Regular attendance	Exercises	physical quality	skills
Score	20	10	30	40
100	20	10	30	40

Special technical evaluation: Comprehensive evaluation of students is conducted through classroom practice, after-school practice, physical fitness, and skill assessment. The teacher selects specialized skills to assess and grade students, examining their mastery of motor skills. Through the testing of students' specialized physical abilities, the physical fitness of students is examined. The specific requirements and scoring standards are shown in Table 6.

In addition, physical education teachers play a core role in the organization and implementation of physical education curriculum teaching. The teacher's personality charm, positive influence, emotional mobilization, atmosphere creation, and classroom organization constantly affect students' learning attitude, participation enthusiasm, classroom performance, implementation effectiveness, and positive feedback. Excellent physical education teachers should create a vibrant and vibrant classroom atmosphere, which requires physical education teachers to have a good image and temperament, a sunny teaching attitude, appropriate words and actions, strong professional literacy, and strong organizational ability. How to utilize limited classroom time for physical education teachers to not only complete routine classroom teaching tasks, but also provide scientific and positive guidance to students in various stages of teaching, stimulate students' enthusiasm for participation, improve participation and teaching effectiveness, is a key problem that needs to be solved in school physical education teaching.

Table 6 Assessment Content and Standards for Student Physical Education Course Scores.

Score and standards		Total (100)			Final score
Assessment content	Grade	Standards and requirements	Score		
1	Regular attendance	A	Attend classes on time without being late or leaving early	16-20	N ₁ ≤20
		B	Occasionally being late or absent from class	11-15	
		C	Frequent absenteeism and lateness issues	≤10	
2	Exercises	A	Good completion of homework exercises after class	8-10	N ₂ ≤10
		B	Basic completion of after-school practice tasks	6-7	
		C	Failure to complete post class practice tasks	≤5	
3	skills	A	Technical standards and smooth movements	21-30	N ₃ ≤40
		B	Technical standards are basically met, and actions are basically in place	11-20	

		C	Technical actions are not standardized and actions are not coherent	≤10	
4	physical quality	A	Excellent physical fitness test	21-30	N_4
		B	Qualified physical fitness test	11-20	≤30
		C	Physical fitness test failed	≤10	
		Total			

It is recommended to use “AHP-BPNN” evaluation model to compare the importance of the relationship between various factors in the quality of physical education in universities. The judgment matrix of the standard layer and each indicator layer was analyzed using “yaahp” software, in order to obtain an easily implemented and scientifically guaranteed evaluation index system for physical education in universities. In the evaluation of the teaching quality of physical education teachers in universities, the evaluation of teaching ability should be more important and should be given attention.

RESEARCH CONCLUSION

(1) In the design of physical education teaching, it is necessary to combine the cultivation of students' abilities to carry out various teaching contents, break through rigid teaching, classify and segment teaching contents, design and combine teaching contents based on classroom timelines, design personalized physical education curriculum teaching plans, and form a more scientific, reasonable, and orderly curriculum teaching mode.

(2) In the process of physical education teaching, positive psychological influence should be exerted (such as teachers' active mobilization, students' active participation, and the creation of an active classroom atmosphere), the relationship between physical education teaching content and the cultivation of students' personality traits should be sorted out, the leading function of physical education teachers should be extended, scientific exercise load should be combined with spiritual motivation guidance language, reasonable arrangement of exercise content should be made, matching the best physiological and psychological adaptation needs of the human body, and improving the viscosity of physical education, Cultivate students' interest and habits in sports.

(3) Cultivating students' excellent personality traits is a crucial task of school education, and physical education is equally responsible. In the process of physical education, both in and out of class, explicit and implicit, attention should be paid to the cultivation of the correlation between teaching content, students' ability improvement, and personality quality. The organic integration and synergy of the three should further improve the quality and effectiveness of school physical education teaching.

(4) Implement the principle of individualized teaching, strengthen the construction of the teaching team, encourage physical education teachers to organically integrate curriculum ideological and political education, special skills, sports and fitness, and physical health, and increase personalized teaching content to make dull and boring sports more vivid and rich. The goals of physical education learning are clearer and more accurate, and physical training is combined to open up a path for innovative sports education.

Author Contribution Statement

Chuanzhong Wu: Performed the experiments; Analysed and interpreted the data; Wrote the paper. Bo Liu: Performed the experiments; Contributed reagents, materials, analysis tools or data; Wrote the paper. Li Xu: Conceived and designed the experiments; Wrote the paper.

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Data Availability Statement

Data contained in the article is the final numerical results of this study, which are true and valid.

Declaration Of Interest's Statement

The authors declare no competing interests.

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