

On the four basic problems of harmonious physical education teaching

LIU GUANGXIN¹, RONG DUNGUO², ZHANG QICHEN³

¹School of Art and Design, Zhejiang Sci-Tech University, Hangzhou 31000, CHINA,

²Dept. of P. E., Shanghai Business College, Shanghai 201400, CHINA,

³Dept. of Business Economics, Shanghai Business College, Shanghai 201400, CHINA,

Published online: May 31, 2022

(Accepted for publication May 15, 2022)

DOI:10.7752/jpes.2022.05162

Abstract:

Harmony produces beauty, and harmonious education is a basic model for implementing essential-qualities-oriented education. Harmonious physical education can bring students a good sports experience, stimulate students' interest in physical education, and promote the active achievement of the "double effect" goal of physical education. What is harmonious physical education? Why should physical education be harmonious? How can we achieve harmonious physical education teaching? Furthermore, to what extent should physical education be harmonious? Following this research idea, we reflect on physical education in reality and analyze the four basic "disharmonious" problems in physical education: first, the problem of disharmony between teachers and students; second, the dissonance of the connection between old and new knowledge. Third, the factors affecting the hand-brain combination are not harmonious. Fourth, the disharmony between the subject and the object that affects the integration of emotion and knowledge. Solving these four basic problems requires the right measure: firstly, adhering to the theory of humanism in education, based on respecting the dominant position of students and giving play to the guiding role of physical education teachers; secondly, promoting the integration of old and new sports knowledge and sports skills through adaptation, assimilation, and also the transfer of knowledge and skills; thirdly, through the unified training of sports intelligence and sports ability, encourage students to use hand and brain together; fourthly, through the organic combination of students' physical fitness, sports intelligence and non-intellectual factors to achieve the integration of emotion and knowledge. Harmonious physical education conforms to the law of interaction between internal and external factors, and inspires students to achieve "five learning", "five mastery", and "five development" and organically combine them.

Key words: harmony; sports intelligence; sports non-intellectual factors; physical fitness

Introduction

Physical education aims to provide students with ideological, political and moral education, impart sports knowledge, teach sports skills, enhance their health awareness, help students establish a solid concept of health, develop good exercise habits, and promote their physical and mental health. From the perspective of physical education teachers, everyone wants to do well in class. Although they will invest much energy to achieve the preset teaching goals, the reality is cruel, and the teaching effect is often far from the goal. In physical education classes, ordinary students will be affected by both subjective and objective factors. . However, the most important factor that causes the difference in teaching effect and affects the rapid improvement of teaching effectiveness is the reason of the teaching concept of physical education teachers. There is no doubt that specific physical education is a dynamic process involving multiple factors. The harmonious play of the comprehensive functions of these factors directly determines the effect of physical education. Here, we describe this problem as the problem of the harmony of physical education. Just as the quality of a car depends on the optimal combination of components, the degree of harmony, the harmonious role of various influencing factors will only achieve a good physical education teaching effect under the correct physical education teaching concept. . Based on the author's decades of physical education teaching experience, I would like to conduct a profound and systematic analysis of what kind of physical education teaching concepts should be upheld in current physical education teaching at all levels and types, strive to achieve harmonious physical education teaching, and achieve the goal of "double effect" ("effective teaching" and "efficient teaching") in physical education teaching.

Everyone is familiar with the concept of "harmony". The issue of harmonious education should also be understood. As early as 1998, the educational circles specially discussed the issue of "harmonious education". The consensus reached at that time was that harmonious education is a mode of implementing essential-qualities-oriented education, and harmonious teaching is the main channel or basic way to use the mode of harmonious education. Although harmonious education has been advocated for many years, what is the effect of teaching in terms of physical education? The effect is not ideal. Therefore, in sports, the issue of harmonious physical education is a topic worthy of frequent discussion and research. So how to carry out harmonious physical

education, I think the main thing is to solve the four major problems in physical education. The four major problems are the interaction between teachers and students, the connection between the old and the new, the integration of hands and brains, and the integration of emotion and knowledge. According to our research and experience in physical education, it must be pointed out that these four major problems have not been solved in the domestic and foreign education circles, both in theory and in practice. These four issues are discussed below.

Teacher-student interaction in physical education teaching

Correctly understanding and treating the interaction between teachers and students in physical education class is a matter of harmonious physical education teaching. There is much interaction between teachers and students in physical education classes, and the completion of various teaching tasks is inseparable from the physical activities of teachers and students. Talking about the relationship between teachers and students in physical education activities, we must first review the general views on the interaction between teachers and students in education. Ancient and modern, at home and abroad, almost all educational circles regard teaching as a bilateral activity between teachers and students. Since it is a bilateral activity, it must involve how to deal with this activity. Bilateral refers to the relationship between teachers and students. From the perspective of development, there are various views on history. However, they can be summed up as nothing more than "two central theories", which are "teacher-centered theory" and "student-centered theory". The teacher-centered theory is authoritarian, and it is impossible to solve the problem of the teacher-student relationship correctly. The student-centered theory is democratic and has a certain reference for improving the relationship between teachers and students. However, Dewey's "child-centered theory" completely obliterates the role of teachers due to the excessive indulgence of children, so it is impossible to handle the relationship between teachers and students properly. Another representative of the "student-centered theory" is Rogers. Because he did not correct the position of teachers and students in teaching, it is impossible to make the relationship between teachers and students truly harmonious. It is not uncommon in all physical education activities to hold the two extreme views of teacher-centered and student-centered theories. The prominent feature of the former is that there are many moralizations, while the latter is just the opposite. The real good physical education is "intensive teaching and more practice" rather than going to extremes, it should follow the "moderate way" (the "moderate mean" is not a discount for the two extreme practices, but a good balance between "the teacher's teaching and the students' practice"). Drawing on the experience and lessons of the two central theories in history, in the specific physical education process, we should form a consensus that in order to establish a harmonious relationship between teachers and students, the principle of interaction between teachers' leading role and students' subject status must be adopted. In physical education, teachers must keep in mind the basic principle of Marxism that external causes work through internal causes. From the student development perspective, students are the internal cause, and teachers are the external cause. Only by respecting the dominant position of students can the leading role of physical education teachers be brought into full play.

Therefore, in teaching, physical education teachers must treat students as the main body from beginning to end and establish a physical education teaching concept of "everything for students, for students' everything, and for all students". The practice has proved that physical education teachers with good teaching effect always do everything possible to make students become the masters of the classroom. For a long time, physical education teachers have played the leading role in physical education classes or even sing a single role. The relationship between teachers and students is not harmonious, and the classroom atmosphere is still very serious. This situation should be changed, and let students be the masters of the sports class. However, it cannot go to extremes. In many cases, the leading role of physical education teachers must be brought into full play. To do this, it is necessary to understand the particularity of physical education teachers fully. Although physical education teachers belong to the category of objects, they are different from physical education media. They are people who are full of life and are living subject objects with thoughts, consciousness and psychology. Physical education teachers can use those teaching media that belong to inanimate objects in a purposeful and planned way to serve physical education teaching and cultivate and shape students' bodies and minds. Based on this, it can be concluded that a harmonious teacher-student relationship can be established only by respecting the main body status of students and the interactive principle of the leading role of physical education teachers, and this harmonious teacher-student relationship is a necessity for harmonious physical education teaching.

New and old connection problems in physical education

The so-called old-new link refers to the relationship between new and old knowledge and new and old skills. Physical education teaching aims to let students acquire new sports knowledge and new sports skills and consolidate old sports knowledge and old sports skills. Therefore, the connection between old and new has always been an important problem in physical education teaching, and the solution to this problem will help students. To master sports knowledge and develop sports skills, the fundamental way to solve this problem is to maintain harmony and coordination in learning new and old sports knowledge and sports skills. Nevertheless, it is not easy to do this in concrete physical education practice. According to the teaching experience and the long-term attention to this problem, how to deal with the old and new connections in physical education teaching can be summarized into four viewpoints in terms of physical education teaching concepts: the first viewpoint is

sports empiricism. It is summed up based on sports experience and lacks a theoretical basis. This view can be expressed as acquiring new sports knowledge and new sports skills based on existing sports knowledge and sports skills and incorporating new sports knowledge and new sports skills into the existing sports knowledge and sports skills system, thus forming a new sports knowledge and sports skills system. A new system of sports knowledge and skills, so that the old and new links can enable students to acquire sports knowledge and skills. As early as two thousand years ago, Confucius emphasized "reviewing the old and learning the new"; the second point of view is the theory of association. Many colleagues in the sports field attribute the solution to the problem of connection between the old and the new in physical education to "association". The associationist psychology that emerged in England in the 17th century attached great importance to the association's role in learning. The viewpoint of associationist psychology can be expressed as establishing new associations based on existing associations, incorporating new associations into existing associations, thereby forming a new association system.

This combination of old and new associations enables students to acquire knowledge. The concept of associationist psychology is also very practical for physical education, not only for sports knowledge, but also for sports skills. A movement rhythm logic that relies on kinesthetic imagery is established through continuous trial and error in physical practice. The formation of this movement rhythm logic marks the mastery of movement skills. This associative point of view can make us know what it is and know why it is in physical education. The third point of view is reflexology. Sports colleagues who hold this view believe that students' physical education is the process of conditioned reflex formation. This point of view can be expressed in the following way: on the basis of the existing conditioned reflex, a new conditioned reflex is established, and the new conditioned reflex is incorporated into the existing conditioned reflex to form a new conditioned reflex system. The combination of conditioning can enable students to acquire motor knowledge and motor skills. This view is very easy to verify in the teaching of motor skills and is therefore correct. Whether it is the mastery of open motor skills or closed motor skills, a stable neuromuscular connection is gradually established through the repeated physical practice of students under certain conditions, and specific sports behaviors are used to achieve sports goals and achieve sports goals. The fourth view is cognitive structure theory. Influenced by the cognitive structure theory, many sports colleagues also hold the cognitive structure theory on the connection between the old and the new sports. This view holds that the mastery of sports knowledge and skills is based on the existing sports cognitive structure to accept the new sports knowledge structure and new sports skill structure, and incorporate the new sports knowledge structure and sports skill structure into the existing sports knowledge structure. The structure of motor cognition and motor skills constitutes a new system of motor knowledge and motor skills. Those mentioned above four basic viewpoints on the connection between the old and the new in physical education show the four stages of a gradual and in-depth exploration of this issue. One viewpoint is more profound than the other. Personally, I think that the cognitive structure theory of the cognitive school can better explain the problem for the general students' sports knowledge learning. Not enough. What is more needed is to establish a nerve-muscle connection that meets the needs of specific motor skills through continuous physical practice and repeated trial and error based on cognition, that is, motor conditioning is the most fundamental and the greatest reality of physical education. According to the views of Piaget and Ausubel, the representatives of the cognitive school, there are four ways in which the motor cognitive structure, sports knowledge and motor skill structure are integrated into students' physical education learning: (1) Adaptation, that is, adjusting the motor cognitive structure. If there are contradictions and incongruities with the structure of sports knowledge and sports skills to be accepted, then reorganize the existing sports cognitive structure to make it adapt to the new sports knowledge and sports skills structure; (2) Assimilation. Suppose the cognitive structure of sports is compatible with the structure of sports knowledge to be accepted and is the same. In that case, the latter can be directly absorbed and integrated. (3) The combination of accumulation and penetration. Through seeing more, hearing more, asking more, and practising more, I accumulate many sports knowledge and skills, and then process, analyze, synthesize, and analyze these sports knowledge and skills through positive thinking and practical exercises. Generalization, inference, in order to integrate.

Accumulation is the foundation, and penetration is innovation. Without a certain accumulation, penetration will become water without a source and a tree without roots. Likewise, without penetration, accumulation will be meaningless. It can be seen that the integration of new sports knowledge and new sports skills with old sports knowledge and old sports skills requires a combination of accumulation and penetration. (4) Use positive motor knowledge and motor skills transfer. Sports knowledge and skills transfer is an important aspect of sports learning transfer. The mutual influence of before and after or old and new sports knowledge and skills is called the transfer of sports knowledge and skills. However, there are two kinds of such effects: one is positive transfer; the other is negative transfer. The reason why the grasp of the process of physical education is very different in physical education is whether physical education teachers understand the before and after sports knowledge and sports skills taught, especially whether there is an essential understanding of the relationship between before and after sports skills, whether it is good at using positive transfer and limiting negative transfer. Teaching practice has proved that the active use of the positive transfer of sports knowledge and sports skills in physical education is beneficial to integrating new sports knowledge and new sports skills with old sports knowledge and old sports skills. To sum up, we can also conclude that only by adopting various physical

education strategies such as adaptation, assimilation, transfer of knowledge and skills, accumulation and integration, can the old and new sports knowledge and skills be harmoniously coordinated and integrated. The concept of physical education with this connection between the old and the new is also a psychological premise for carrying out harmonious physical education.

The problem of hand-brain combination in physical education

The separation and opposition between mental work and manual work for a long time is reflected in the general teaching, which has caused the disconnection between the brain and the hands. The hand-brain disconnect results from not paying attention to theory and practice's combination or even separation. From the perspective of various general teachings that focus on cultural knowledge (relative to skills), hand-brain separation in traditional teaching is quite serious, while modern teaching thinking particularly emphasizes hand-brain integration. As early as the 1940s, Tao Xingzhi, a famous Chinese educator, advocated the liberation of children's hands and brains in his anti-traditional "six liberations". Not only that, but Tao Xingzhi also advocated the combination of children's hands and brains, pointing out that while using the brain, it is necessary to experiment with the hands, and to think with the brain; while using the hands, it is possible to create. Regrettably, Tao Xingzhi's creative and educational idea of combining hands with brains has not been realized for a long time. In the general teaching of our country, there is still a serious phenomenon of hand-brain disconnection, such as the so-called problem of high scores and low abilities. Does the problem of hand-brain combination discussed here do not exist in physical education with physical activity as the main feature? The fact is just the opposite, and it goes to the other extreme. It is embodied in the insufficient depth of understanding of this issue; how to combine hand and brain; how to coordinate the three factors of motor intelligence, non-motor intelligence and physical fitness, theoretical understanding and practical operation. According to sports psychology, the research or presentation of intelligence should indicate the area of expertise involved.

Therefore, in physical education, all kinds of physical learning activities need students' sports intelligence and sports non-intellectual factors. The main reasons for the problem of "hand-brain separation" in physical education teaching are as follows: First, for a long time, it has been only natural that "those who labor with their minds govern others; those who labor with their strength are governed by others". After the founding of the People's Republic of China, although this idea has been criticized, for various reasons, this decadent feudal dross is far from disappearing. This opposition between the mind and the labor is the social basis and ideological source of the disconnection between the hand and the brain in all teaching, including physical education. With the leap-forward development of my country's comprehensive strength, people's yearning and pursuit for good things such as health, sports, leisure and entertainment have become increasingly prominent, and their attitude towards sports is changing in a better and correct direction. The opposition between hand and brain in daily life will gradually improve until people completely abandon it; second, the theory is not connected with practice enough. Practice has proved that physical education is a multi-disciplinary knowledge about sports. A physical education teacher's knowledge reserve determines his teaching level and potential. People pay more and more attention to the value of physical education research and the training of physical education teachers. In the past, the low level of physical education teaching and the disconnection between theory and practice were often due to the weak concept of combining theory and practice, and the more important reason was the lack of relevant teaching knowledge reserves of physical education teachers.

The long-term disconnect between theory and practice is also an important reason for the separation of hands and brains in physical education. In fact, in turn, prolonged hand-brain separation has deepened the disconnect between theory and practice. Combining theory with practice is a common problem. Just because it is common, it shows that this problem has not yet been solved. Therefore, in various teachings, we must pay close attention to the combination of theory and practice, to encourage students to use both hands and brains. Third, strengthen the unified training of sports intelligence and sports ability. From a psychological point of view, the hand-brain combination in physical education is the combination of sports intelligence and sports ability. According to the practice of physical education, we believe that in physical education, students with a high level of sports intelligence will not necessarily have strong sports ability; on the contrary, students with high sports ability will definitely have high sports intelligence. Therefore, in the specific physical education teaching process, we should pay attention to the development of students' sports intelligence while emphasizing the development of their athletic ability, which is also in line with the "relatively independent view of intelligence" constructed in ancient China, which is the psychological basis for emphasizing "hand-brain combination" in physical education teaching. All in all, emphasizing the unified training of sports intelligence and sports ability in physical education is the core and key to solving the problem of hand-brain combination. Fourth, because the physical education time in physical education class is always limited, it is limited for students to meet the goals of mastering motor skills and cultivating exercise habits. Therefore, from the perspective of hand-brain integration, we emphasize that attention should be paid to combining physical education classroom teaching with physical education extracurricular activities. Relatively speaking, physical education classroom teaching still focuses on the operation of the brain, that is, the operation of sports intelligence, in contrast the extracurricular activities of physical education focus on the hands-on operation. If the physical education classroom teaching and sports extracurricular activities are combined, it will obviously help to solve the problem of hand-brain

integration in physical education and sports. Therefore, in order to do this, the value of sports extracurricular activities must be highly valued. Let students play the leading role in extracurricular sports activities, physical education teachers take a back seat, and only play a guiding role, allowing students to freely combine sports according to their sports interests and sports emotions, and give full play to students' initiative, enthusiasm, independence and creativity. To sum up, we can draw the following conclusions: conscientiously strengthen the combination of work of hand and brain, the combination of theory and practice, the combination of classroom teaching and extracurricular activities, and effectively integrate these combinations into the unified training of students' athletic intelligence and athletic ability, and students will be able to use both hands and brains harmoniously. Harmonious use of hand and brain is essential for carrying out harmonious physical education teaching.

The problem of the integration of emotion and knowledge.

The basic meaning of integrating emotion and knowledge is to use knowledge to inspire emotion and promote knowledge with emotion. For general teaching, it is a core of harmonious teaching. For a long time, people have been focusing on thinking about teaching from the perspective of cognition, and some educators even equate the teaching process with the cognition process. For example, Kairov of the former Soviet Union held this view. Of course, this view is not wrong, because people acquire knowledge through cognition, observation, memory, imagination, and thinking, but this view ignores the role of "affection" in teaching. This kind of view is especially harmful to the teaching of sports and even the arts. For physical education, the use of sports non-intellectual factors will directly determine the dual effect of physical education. According to the theory of non-intellectual factors in our country, the non-intellectual factors of sports for students to carry out physical education or sports are the "power-regulation system" for all physical education activities. The functions and values of maintaining, regulating, strengthening, and compensating are very important. More than two thousand years ago, Confucius stated clearly in the Analects: "To learn and at due times to repeat what one has learnt, is it not after all a pleasure?"

That friends should come to one from afar, is this not after all delightful? "Regular review, including practice, is not a very pleasant thing? Isn't it a joy to discuss problems and exchange knowledge with friends from afar? Obviously, Confucius has long pointed out that learning should attach great importance to the combination of "knowledge and emotion". It can be said that the fine tradition of eagerness to learn and happiness to learn formed in ancient China reflects the requirements of the combination of knowledge and emotion, and the integration of knowledge and emotion. It is human nature to seek pleasure and avoid hardship. For sports learning, sports emotions are expanded, and the non-intellectual factors of sports are the "engine" of sports learning, which directly determines the effect of sports learning. The problem of the fusion of knowledge and emotion in physical education is actually the fusion and combination of sports intelligence and sports non-intellectual factors. Sports intelligence belongs to the category of cognition, and the generalized "emotion in sports" is equivalent to the non-intellectual factors of sports. In this sense, we believe that in physical education, there are three interacting "body and mind flows" running through students. One is the flow of sports intelligence, that is, the flow of sports cognition; the other is the flow of sports non-intellectual factors, that is, the flow of sports intention; the other is the flow of physical energy, that is, the flow of physical strength. These three physical and mental flows are interdependent and influence each other in the process of students' physical education. Each body-mind stream has a specific impact on students' actual physical education learning. It is just that sometimes the physical stream prevails, sometimes the motor-intelligence stream prevails, and sometimes the athletic non-intelligence stream prevails. Each student's specific physical learning effect is essentially the result of the interaction of the three physical and mental flows of students under the guidance of physical education teachers. Different combinations of these three physical and mental flows will produce different physical learning effects, as shown in Figure 1.

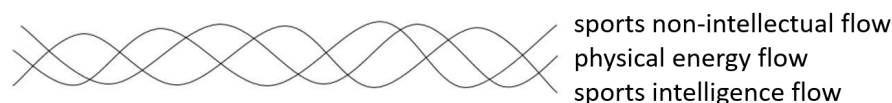


Figure 1 The interactive relationship between sports intelligence flow, sports non-intellectual flow and physical energy flow in students' physical learning interaction

It can be seen that, for a certain sports learning activity, the regulation of students' optimal physical learning state mainly depends on the optimal combination of these three physical and mental flows of students. The selection of all physical education teaching content, the application of methods and the control of exercise load should be carried out around this goal. Practice has proved that realizing this is truly understanding the true meaning of specific physical education teaching. From the point of view of system theory, in physical education, the sports intelligence system of students is composed of five basic psychological factors: sports observation, sports attention, sports memory, sports thinking and sports imagination; Sports non-intellectual factors include many factors, but in its narrow sense, it is also composed of five basic psychological factors,

namely sports motivation, sports interest, sports emotion, sports will and sports character; the physical fitness factor system mainly refers to the students' sports quality system, and there are also five factors. Namely speed, strength, endurance, flexibility and agility. All physical education students are inseparable from their sports intelligence factor system, sports non-intellectual factor system and physical fitness factor system. These three systems play different roles in all physical education activities. The sports intelligence factor system is the "execution-operating system", the sports non-intellectual factor system is the "dynamic-regulation system", and the physical fitness system is the "material basis-support system".

According to Figure 1, the relationship between the three major participation systems for students to carry out all physical learning activities can be visually seen. From the perspective of sports intelligence factors in students' physical learning activities, in physical education, while allowing students to master sports knowledge and sports skills, they should also purposefully and systematically educate students to learn to observe, learn to remember, learn to imagine, learn to think, learn to pay attention, this can be referred to as "five mastery" for short; from the perspective of non-intellectual factors of sports, in physical education, students should be trained in "five mastery", that is, willing to learn, eager to learn, happy to learn, diligent and independent study. The psychological basis of "willing to learn" in students' physical education is learning motivation; the psychological basis of "loving to learn" is learning interest; the psychological basis of "happy learning" is learning emotion, mainly happiness; the psychological basis of "hard-working" is learning Will; the psychological basis of "independent learning" is learning character, mainly independence. From the perspective of sports quality, all students' physical education is inseparable from the development and cultivation of students' five sports qualities, namely "five development ". In general, it should be pointed out that when it comes to physical education, the focus is on developing students' physical fitness, skills, and tactical ability. The technical and tactical abilities that students learn and cultivate are fundamentally the crystallization of the organic combination of physical fitness, sports intelligence and sports non-intellectual factors. The interactive mode in which the sports intelligence factors, sports non-intelligence factors and physical fitness factors of students in physical education teaching must be organically combined can be represented by the following figure, as shown in Figure 2.

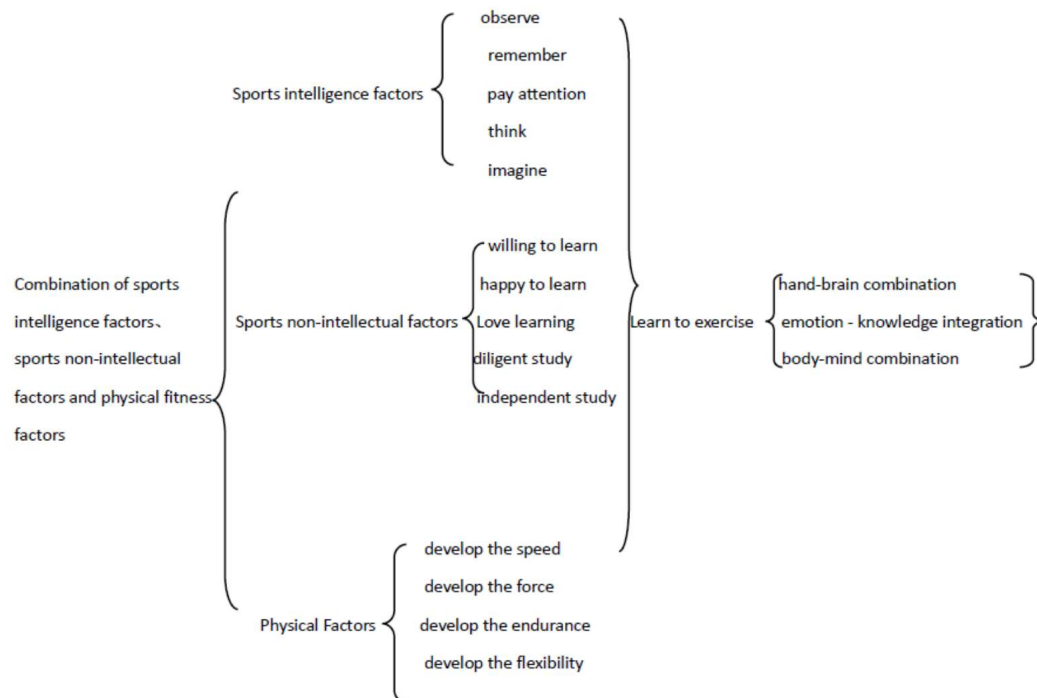


Figure 2. The relationship between the five associations, five studies and five development of students' physical education

According to Figure 2, the problem of "hand-brain combination" emphasized in the general teaching sense, in physical education, requires students to achieve "five learning", "five mastery", and "five development". The reason why physical education is an art of teaching is clear at a glance. The level of physical education teachers' teaching level depends on whether they can well control the three physical and mental flows in the process of students' physical education learning and fundamentally realize the "five learning", "five mastery" and "five development". Whether these three "five" problems can be well handled in specific physical education teaching practice is the key to effectively solving the problem of "intelligence and emotion integration" in physical education teaching and the fundamental way to realize harmonious physical education teaching truly. It is the basic symbol of carrying out harmonious physical education effectively.

Conclusion

In order to improve the quality of physical education classroom teaching, we must focus on the main contradiction, strive to optimize the parameters of physical education, and change the concept of physical education. According to physical education teaching experience and special research, in order to achieve harmony in physical education activities, it is necessary to deeply understand and deal with four basic problems in physical education teaching: First, according to the Marxist principle of "the relationship between internal and external factors", in order to achieve harmony in physical education, we must first correct the status of teachers and students, and correctly solve the "interaction problem between teachers and students"; secondly, according to the characteristics of physical education, teaching strategies such as adaptation, assimilation, and positive migration should be adopted to correctly handle the new and old connection problem of physical education teaching content. Thirdly, from the perspective of integrating theory with practice, we must correctly handle the "hand-brain integration problem"; fourthly, from the function of sports non-intelligence factors in physical education activities, we must correctly handle the "problem of the integration of emotion and knowledge". Physical education should guide and inspire students to achieve "five learning", "five mastery", and "five development" and organically combine them. This is the basic way to carry out harmonious physical education teaching.

References:

- Zhang Jian. (2014) Harmony and Synergy: New Concepts of Ideological and Political Education—Comment on "Harmonious Education and Collaborative Innovation: New Vision of Ideological and Political Theory Education in Colleges and Universities". *Education Theory and Practice*, 34(30), 62
- Yan Guocai, Ma Jiale. (1992) *Non-intelligence factors and school education*. Xi'an: Shanxi People's Education Press, 4
- Wu Fei. (2014) The thinking category and enlightenment of harmonious education. *Journal of Inner Mongolia Normal University*, 27(11), 27-29
- Shen Deli. (2001) *Non-intelligence factors and talent cultivation*. Beijing: Education Science Press, 11
- Zhang Liwei, Mao Zhixiong. (2003) *Sports Psychology*. Shanghai: East China Normal University Press.
- Yan Guocai. (2002) *Intelligence Factors and Learning*. Beijing: Education Science Press.
- Liu Xianjun. (2018) The connotation and significance of personalized education. *Journal of Northwestern Polytechnical University (Social Science Edition)*, (01), 15-21
- Wang Lijun et al. (2017) Discussion on constructing the education model of "Four Projects of Harmonious Education" in higher vocational colleges. *Education and Teaching Forum*, (47), 261-262
- Rong Dunguo, Liu Yimin. (2005) Analysis of PIN combined with sports training theory. *Journal of Beijing Sports University*, (2), 256-259
- Chen Lingling. (2017) Analysis of the theory and system construction of harmonious education in colleges and universities. *University Education*, (12), 19-21
- Rong Dunguo, Wu Ying, etc. (2010) Views of PIN Combination Theory on Several Basic Issues in Sports Training. *Journal of Beijing Sports University*, (3), 116-119