# Research on the Dilemmas in the Development of Physical Fitness Levels of College Students and Sports Policies and Regulations 

Hongjun Tao<br>Department of Physical Education, Anhui Jianzhu University, Hefei, 230601, China

Keywords: Sports Policies and Regulations; College Students; Physical Fitness; Development Dilemmas; Countermeasures


#### Abstract

This paper primarily analyzes and studies some relevant sports policies and regulations for colleges and universities promulgated by the central government, the Ministry of Education, and the General Administration of Sport of China since 2000 using the methods of literature review and comparative analysis. It also compares the physical fitness levels of Chinese college students since 2005. Based on this analysis, the paper summarizes the reasons why the physical fitness levels of Chinese college students are at a relatively low level: limited physical education courses, heavy academic pressure, insufficient sports facilities, diverse extracurricular activities with many choices, lack of awareness of a healthy lifestyle among students, and lax enforcement of the requirement that students must meet the Student Physical Fitness Standards to graduate. Finally, it proposes effective strategies to promote the physical fitness levels of college students: increasing physical education class hours, constructing sufficient sports facilities, strictly enforcing the regulation that students who do not meet physical fitness standards cannot graduate, implementing reward and penalty policies, and strengthening health education.


The "Outline of Building a Leading Sports Nation" issued by the General Office of the State Council of China proposes that by 2035, the proportion of urban and rural residents meeting the National Physical Fitness Measurement Standards should exceed $92 \%$; the physical literacy of young people should be significantly improved, and their health status should be markedly better. By 2050, China aims to fully become a leading modern sports nation. In recent years, the Chinese government has highly emphasized the development of sports, issuing numerous policies to promote sports development and setting specific medium- and long-term development goals for the sports industry. However, since the reform and opening up, in stark contrast to the annually improving physical fitness levels of primary and secondary school students, the physical fitness levels of Chinese college students have been declining. Therefore, improving the physical fitness levels of Chinese college students has become a major issue that urgently needs to be addressed.

## 1. Important Policy Documents Related to College Sports Issued Since 2000

July 4, 2002: Notification on the "Standards for Student Physical Health (Trial Plan)" and
"Implementation Measures." This document required provincial education administrative departments to select at least two colleges to start implementing the plan with first-year students in the 2002 academic year to gain experience. From the 2003 academic year, the implementation was expanded to all colleges and universities across the country.

May 27, 2007: The State Council issued "Opinions on Strengthening the Physical Fitness of Youth," which required the full implementation of the "National Student Physical Health Standards" and emphasized using health quality as an important indicator for evaluating the comprehensive health development of students.

September 6, 2009: The "Regulations on National Fitness" stipulated that schools must ensure students participate in one hour of physical activity every school day and hold at least one schoolwide sports meeting each academic year. Schools with the necessary conditions should also plan activities such as hiking, camping, and sports summer (winter) camps.

June 11, 2014: The "Basic Standards for Physical Education Work in Colleges and Universities" required that each physical education class must ensure a certain level of exercise intensity. Activities aimed at improving students' cardiorespiratory function must account for no less than $30 \%$ of the class content. Additionally, fitness projects reflecting students' cardiorespiratory function should be included in exams, with a weight of no less than $30 \%$ in the final score[1].

July 22, 2015: The "Implementation Opinions on Accelerating the Development of Youth Campus Football" planned to support the construction of 50,000 youth campus football specialty schools and build approximately 200 high-level college football teams by 2025 . Football was used as a breakthrough to promote the physical and mental health, physical fitness, and overall development of young people[2].

October 25, 2016: The "Healthy China 2030" Planning Outline required the implementation of a youth sports activity promotion plan, fostering youth sports interests, ensuring that young people master at least one sports skill, and guaranteeing students engage in at least one hour of physical activity per day. By 2030, the standard rate for school sports facilities and equipment should reach $100 \%$, and students should participate in moderate to high-intensity sports activities at least three times a week, with over $25 \%$ meeting the excellence standards of the National Student Physical Health Standards.

October 8, 2019: The "Opinions on Deepening Undergraduate Education and Teaching Reform and Comprehensively Improving the Quality of Talent Training" pointed out the need to reasonably increase physical exercise time, strengthen the assessment of student sports courses, and stipulate that students who do not meet the "National Student Physical Health Standards" cannot graduate[3].

October 15, 2020: The "Opinions on Comprehensively Strengthening and Improving School Physical Education in the New Era" emphasized that school physical education is fundamental to achieving the core task of cultivating virtue and improving students' comprehensive qualities. The policy advocated for a health-first educational philosophy, promoting the balanced development of cultural studies and physical exercise, celebrating the Chinese sports spirit, and promoting traditional Chinese sports. By 2035, a diverse, modern, high-quality school sports system should be basically formed.

## 2. Recent Changes in the Physical Fitness Levels of Chinese College Students

### 2.1. The 2005 'National Student Physical Fitness and Health Survey Results" Announcement[4]

### 2.1.1. Decline in Vital Capacity

The survey results showed that the vital capacity levels of students of all ages in primary, secondary, and tertiary education continued to decline. Compared to 2000, the average vital capacity levels of

Han Chinese urban males, urban females, rural males, and rural females aged 19-22 decreased by 160 $\mathrm{ml}, 238 \mathrm{ml}, 161 \mathrm{ml}$, and 225 ml , respectively, in 2005.

### 2.1.2. Decline in Speed Quality

The survey results indicated that, compared to 2000 , the 50 -meter dash performance of Han Chinese students showed a decline in about $87 \%$ of age groups, with only a few age groups remaining unchanged. Urban males and females aged 19-22 showed an average decline of 0.1 seconds and 0.3 seconds, respectively, while rural males and females showed an average decline of 0.1 seconds and 0.3 seconds, respectively.

### 2.1.3. Decline in Explosive Power

The survey results showed a comprehensive decline in standing long jump performance among students of all educational levels. Compared to 2000, urban males, urban females, rural males, and rural females aged 19-22 showed an average decline of $3.6 \mathrm{~cm}, 3.7 \mathrm{~cm}, 4 \mathrm{~cm}$, and 5.2 cm , respectively, in 2005.

### 2.1.4. Decline in Strength Endurance

The survey results indicated that, compared to 2000, the number of pull-ups for urban and rural males aged 19-22 decreased by an average of 1.5 and 1.3 times, respectively. For females aged 1922 , the number of sit-ups performed in one minute decreased by an average of 1.5 times/minute and 2.1 times/minute, respectively.

### 2.1.5. Decline in Endurance Quality

Compared to 2000, the 1000-meter run performance of urban and rural males aged 19-22 decreased by an average of 11.9 seconds and 9.7 seconds, respectively. For urban and rural females aged 19-22, the 800 -meter run performance decreased by an average of 9.2 seconds and 9.8 seconds, respectively.

### 2.1.6. Continued Increase in Obesity Rates

The survey results indicated that the detection rates of overweight and obesity among Han Chinese students aged 7-22 continued to increase, becoming another major factor affecting students' nutritional health status. Specifically, in 2005, the detection rates of overweight and obesity among urban males aged $7-22$ were $13.25 \%$ and $11.39 \%$, respectively, an increase of 1.4 and 2.7 percentage points compared to 2000 . For urban females, the rates were $8.72 \%$ and $5.01 \%$, respectively, an increase of 0.7 and 0.9 percentage points compared to 2000 . For rural males, the rates were $8.20 \%$ and $5.07 \%$, respectively, an increase of 1.8 and 1.6 percentage points compared to 2000 . For rural females, the rates were $4.61 \%$ and $2.63 \%$, respectively, an increase of 1.2 and 0.4 percentage points compared to 2000.

### 2.1.7. High Prevalence of Poor Vision

The survey results indicated that the prevalence of poor vision among students in primary, secondary, and tertiary education remained high. In 2005, the prevalence of poor vision among college students was $82.68 \%$ ( $82.43 \%$ in urban areas and $82.95 \%$ in rural areas), an increase of 1.1 percentage points compared to 2000 .

## 2.2. "2010 National Physical Fitness Monitoring Bulletin"

The bulletin indicated that the physical fitness of college students had been declining continuously for 25 years. Compared to 1985 , vital capacity had decreased by nearly $10 \%$. The 800 -meter run performance for female college students and the 1000 -meter run performance for male college students had decreased by $10.3 \%$ and $10.9 \%$, respectively. Standard pull-ups had become nearly impossible, and "dread of running" had become common. Sudden deaths during physical tests occurred frequently, placing school sports in an embarrassing situation[4].

## 2.3. '2014 National Student Physical Fitness and Health Survey Results"

The bulletin indicated that the physical fitness of college students continued to show a declining trend, with the prevalence of poor vision remaining high and showing a tendency towards younger ages. The obesity rates among students of all age groups continued to rise[6]

### 2.4. The Eighth National Student Physical Fitness and Health Survey

On September 4, 2021, the Ministry of Education announced the results of the eighth national student physical fitness and health survey. The results showed that the proportion of students aged 19-22 who met excellent physical fitness standards increased by 0.2 percentage points. The height of males aged $19-22$ increased by 0.81 cm , and their weight increased by 2.86 kg . The height of females increased by 0.62 cm , and their weight increased by 0.83 kg . The vital capacity of males and females aged 19-22 increased by 92.3 ml and 102.2 ml , respectively. In 2019, the number of sit-ups performed in one minute by females of all age groups increased by 1.0

The Director of the Department of Physical Education, Health, and Arts Education of the Ministry of Education, Wang Dengfeng, pointed out that although the proportion of students meeting excellent physical fitness standards has gradually increased, the improvement from 2014 to 2019 among college students was only 0.2 percentage points, indicating almost no growth. While primary and secondary students showed improvement in flexibility, strength, speed, and endurance, college students did not. Issues such as myopia, obesity among teenagers, and declining physical fitness levels among college students have not been effectively curbed.

### 2.5. April 24, 2021, CCTV News 'Student Physical Fitness Survey: About 30\% of College Students Nationwide Fail Physical Fitness Tests"

As of 2020, the failure rate of student physical fitness tests nationwide was $6.5 \%$ for primary school students, $14.5 \%$ for middle school students, $11.8 \%$ for high school students, and $30 \%$ for college students. Wang Dengfeng, Director of the Department of Physical Education, Health, and Arts Education of the Ministry of Education, pointed out that the physical fitness levels of primary school students are the highest, and compared to high school, middle school, and even primary school students, college students show a significant decline

## 3. Analysis of the Reasons for the Decline in the Physical Health of Chinese College Students

### 3.1. Limited Physical Education Classes

In China, universities generally offer physical education (PE) classes only during the first and second years, with one 90 -minute class per week. Very few universities offer PE classes for all four years. Given the current situation, PE classes play a very important role in promoting physical
exercise among college students. Without PE classes in the third and fourth years, many students significantly reduce the frequency and duration of their participation in physical activities.

### 3.2. Heavy Academic Pressure

Due to the high difficulty and heavy workload of specialized courses, many students spend most of their time and energy on academics, leaving little time for physical exercise. Additionally, a considerable number of students start preparing for postgraduate entrance exams in their third year and begin job hunting and internships in their fourth year, becoming even busier and having less time for physical exercise.

### 3.3. Insufficient Sports Facilities

Currently, the per capita sports facilities area in Chinese undergraduate institutions is still very low, failing to meet the demand for sports activities for all students. For example, a campus typically has only two athletic fields and two corresponding football fields, which are barely sufficient for the 20,000 to 30,000 students. The lack of sports facilities increases the difficulty for students to engage in physical exercise, thereby suppressing their enthusiasm for sports to some extent.

### 3.4. Diverse Extracurricular Activities and Many Choices

College students have a rich and colorful life with many choices during their free time. Online games, social media, and mobile social networking apps have a strong attraction for college students, with some students becoming addicted and spending a lot of their free time on these activities, thereby encroaching on the time available for physical exercise.

### 3.5. Weak Awareness of a Healthy Lifestyle

Currently, health education is not widespread in Chinese universities. Many students do not realize the importance of physical health or the significance of physical exercise for health. Although educational authorities emphasize and urge universities to carry out health education, it has not reached the desired level due to the varying degrees of importance attached by university leaders, the availability of teaching staff, and course offerings. Many universities offer health education as elective courses, but the number of courses and students enrolled are limited, making it impossible to cover all students. Some even equate health education with PE classes. Therefore, there is still much work to be done in promoting the understanding of health importance among college students and encouraging them to adopt a healthy lifestyle.

### 3.6. Lax Enforcement of Sports Regulations in Universities

The regulation from the "Opinions on Deepening Undergraduate Education and Teaching Reform to Comprehensively Improve the Quality of Talent Training" stating that students who do not meet the "National Student Physical Fitness Standards" cannot graduate is not strictly enforced. Currently, universities place high importance on graduation rates and employment rates. When students fail the physical fitness test, universities often allow leniency and use various methods to help students pass the test so that graduation is not affected. This lax enforcement leads to some students not taking the physical fitness test seriously and not thinking of improving their test scores through enhanced exercise but rather hoping for a lucky break.

## 4. Strategies to Improve the Physical Health Levels of College Students

### 4.1. Increase Physical Education Class Hours

Considering the national conditions of China, universities can offer PE classes for all four years. Many American universities have already made PE classes elective, based on the sound physical education students receive in elementary and secondary schools, which equips them with basic sports skills and habits. In contrast, Chinese students do not generally acquire sports skills or develop exercise habits during elementary and secondary school. During physical fitness tests, some students cannot perform the basic technique of standing long jump or the starting posture for running; many students do not do warm-up exercises before 50 -meter, $800-$ meter, and 1000 -meter runs. Therefore, current university PE classes play an irreplaceable role in cultivating sports skills and exercise habits.

### 4.2. Construct Sufficient Sports Facilities

Adequate sports facilities are the foundation for promoting student physical activities. Through research, understanding the demand for sports facilities among students, and constructing sufficient multi-sport facilities according to the popularity of different sports can fully meet the students' needs for physical activities. Sports facilities are constrained by funding and campus space. Creative designs can maximize the use of campus space, such as using rooftops and basements. Simple covered areas can be built for some indoor activities to save funds. Adequate sports facilities will inevitably enhance students' enthusiasm and initiative for participating in physical exercise.

### 4.3. Strict Enforcement of Sports Policies and Regulations

Lax enforcement of policies can lead to negative guidance for students. Some students may develop a false understanding of the physical fitness test, thinking that they can pass regardless of their efforts. This negative guidance can cause a chain reaction, discouraging students from engaging in physical exercise. By strictly enforcing the regulation that students who fail the physical fitness test cannot graduate, universities and some students may experience short-term pain. However, in the long run, students will become more motivated to exercise, take the fitness test seriously, and improve their test scores through increased physical activity, creating a virtuous cycle that enhances college students' physical health.

### 4.4. Implement Reward and Punishment Policies

Schools should reward students with outstanding physical fitness test scores through material or spiritual incentives, such as bonuses or "Excellent Physical Fitness Test" certificates. Schools should also implement restrictions on students with poor or failing test scores in areas such as awards, scholarships, student leadership positions, and graduate school recommendations. Reasonable reward and punishment measures can encourage and warn students, promoting physical exercise among college students.

### 4.5. Strengthen Health Education

Health education should encompass not only physical health but also mental health, social health, occupational health, spiritual health, environmental health, and financial health. Health education plays a critical role in helping college students acquire health knowledge, develop healthy lifestyles, and improve physical health levels. Universities should use various means, such as elective courses,
online classes, and lectures, to promote health education, enabling students to set long-term healthy living goals and form lasting exercise habits and healthy lifestyles.

## 5. Conclusion

In recent years, the central government has attached great importance to the physical health of citizens, especially young people, proposing the concept of building a leading sports nation and issuing many important policies and regulations to promote the physical health of college students. However, the current physical health status of college students remains low, far from the central government's development goals. It is urgently necessary to conduct extensive and in-depth analysis and research to identify the root causes of the problem. Through the concerted efforts of educational authorities at all levels and universities, by strictly enforcing central sports policies and regulations and actively taking various measures, the overall physical health level of Chinese college students can be effectively improved.

## Acknowledgement

Key Project of Scientific Research in Higher Education Institutions in Anhui Province (Philosophy and Social Sciences) (Project No.: 2023AH050153)

## References

[1] Ministry of Education. "Basic Standards for Physical Education Work in Colleges and Universities" [EB/OL]. 2014-06-12/2024-03-12
[2] Ministry of Education. "Implementation Opinions on Accelerating the Development of Youth Campus Football" [EB/OL]. 2015-07-22/2024-03-12
[3] National Student Physical Fitness and Health Survey Research Group. 2005 Report on Physical Fitness and Health of Chinese Students [M]. Beijing: Higher Education Press, 2007. 549-677.
[4] General Administration of Sport of China. 2010 National Physical Fitness Monitoring Bulletin [EB/OL]. 2011-09-02/2024-03-12
[5] General Administration of Sport of China. 2014 National Physical Fitness Monitoring Bulletin [EB/OL]. 2015-11-25/2024-03-12
[6] Ministry of Education. Results of the Eighth National Student Physical Fitness and Health Survey [EB/OL]. 2021-09-03/2024-03-12

