

# *Study on the Influence of Extracurricular Sports on Adolescent Social Adaptability*

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**Abstract:** Social adaptability is a kind of executive adaptability to achieve a harmonious state with the society. The adolescent stage is a key period for the individual physiological and psychological development, and its good social adaptation state is of great significance to the individual social development. In order to explore the mechanism of improving adolescent social adaptability, 220 teenagers in the seventh to ninth grade were investigated based on the diagnostic scale of social adaptability, and preliminarily explored the influence of extracurricular sports on their social adaptability. The results show that different frequencies, different forms, different intensity of extracurricular sports has a significant effect on adolescent social adaptability, while different items and different length are not significant. It is concluded that in order to better improve the social adaptability of teenagers, it is suggested that they should pay attention to the frequency, form and intensity of participating in extracurricular sports, especially to actively participate in collective extracurricular sports with moderate frequency and intensity.

## **1. Introduction**

The Decision of The State Council on the reform and development of basic education and the Notice of The State Council on printing the Program for the Development of Chinese Women and the Program of Chinese Children clearly point out that improve the social adaptability and social practice ability of the compulsory education youth, and promote the complete and healthy development of physical, mental and social adaptability [1]. Therefore, social adaptability is an important goal for the development of adolescent physical and mental health. American psychologist Hollingworth said that junior high school students are in the "psychological weaning period", and educators believe that teenagers in the "middle school turbulence period" are characterized by blind, rebellious, irritable, emotional, violation of discipline and regulations, but also have the characteristics of plasticity, initiative and pursuit of independence. Therefore, the junior high school stage is not only a dangerous period of development, but also a critical period of education. Good social adaptability can reduce psychological contradictions, eliminate anxiety, and make it better adapt to the environment, so it is particularly important to cultivate the social adaptability of teenagers. As the continuation and extension of school physical education,

extracurricular sports have the characteristics of open, comprehensive and flexible, which is conducive to enhancing physical fitness, happy body and mind, long-term active participation in sports activities, can enhance students' self-expression ability, self-realization ability and interpersonal relationship skills [2]. The new curriculum reform also clearly puts forward that one of the five goals of school physical education is to cultivate students' social adaptability, so it is necessary to study the impact of extracurricular sports on the social adaptability of teenagers, so as to provide a theoretical basis for the development of extracurricular sports. This paper analyzes the influence of teenagers' participation in extracurricular sports on their social adaptability under different frequencies, duration, form, project and intensity, and aims to provide theoretical basis for improving teenagers' social adaptability and provide some reference for the development of extracurricular sports in junior middle schools.

## **2. Research Objects and Methods**

### **2.1. Study Subjects**

This paper takes "the influence of extracurricular sports on the social adaptability of teenagers" as the research object, and investigates the current situation of extracurricular sports in the extracurricular sports in three middle schools in Nantong city.

### **2.2. Research Methods**

#### **2.2.1. Literature and Data Method**

This paper searches the literature related to the topic selection on CNKI, Wanfang database and other websites, aiming to understand the relevant theoretical knowledge and research results of extracurricular sports and teenagers' social adaptability, so as to lay a solid foundation for the research of the paper.

#### **2.2.2. Questionnaire Survey Method**

##### **2.2.2.1. Questionnaire Design**

According to the basic requirements of the questionnaire design, the questionnaire of extracurricular sports and youth social adaptability was developed. The questionnaire consists of three parts. The first part is the basic information of teenagers, including gender and school; the second part is the information of teenagers' participation in extracurricular sports, including the frequency, duration, form, item and intensity; the third part is the diagnostic scale of social adaptability, compiled by Professor Zheng Richang with 20 items.

##### **2.2.2.2. Credit Validity of the Questionnaire**

The social adaptability diagnosis scale was compiled by Zheng Richang, doctoral supervisor of Beijing Normal University. Xin Yong [3] scholar tested the reliability of the scale. The results showed that the Cronbach $\alpha$  coefficient of the scale is between 0.656 and 0.806, the Cronbach $\alpha$  coefficient of the total scale is 0.921, and the retest reliability coefficient is 0.907, indicating that the scale has high reliability and can be directly used in this study.

##### **2.2.2.3. Questionnaire Distribution and Recovery**

The questionnaire survey adopted the random sampling of teenagers, and 80 questionnaires were

distributed to Beicheng Middle School of Gangzha District of Nantong City, Shigang Middle School of Tongzhou District and Bayi Middle School of Chongchuan District respectively, among which 220 were valid questionnaires.

### 2.2.3. Mathematical Statistics Method

After the collected questionnaires were classified and sorted out, the data were processed and analyzed by using SPSS 25.0 statistical software.

## 3. Study Results and Analysis

### 3.1 Analysis of the Status Quo of Youth's Participation in Extracurricular Sports

A total of 220 respondents, including 109 boys and 111 girls. A total of 220 respondents were surveyed, including 109 boys and 111 girls. The results of the survey show that the surveyed teenagers participate in extracurricular sports every week. Among them, the number of teenagers who participated in extracurricular sports for 1-2 times a week accounted for 48%, and the number of teenagers who participated in extracurricular sports for less than 30min per day accounted for 70%. These teenagers mostly participate in extracurricular sports in the form of group sports, and their extracurricular sports are mainly running and badminton. In addition, among these teenagers, the intensity of their participation in extracurricular sports is mostly medium and medium intensity.

### 3.2 Analysis of the Social Adaptability of Adolescents

Social adaptability scores of men and girls were  $44.3578 \pm 7.12003$ ,  $43.3153 \pm 8.19865$ , and girls were slightly lower than boys. According to the independent sample t-test, the results showed that  $t=0.291$ ,  $\text{Sig.} > 0.05$ , indicating that there was no significant difference in social adaptability, that is, the difference between social adaptability and gender was not significant, which is consistent with the results of Lou Xiaolu [4] and Liu Yi [5].

### 3.3 Analysis of the Influence of Extracurricular Sports on the Social Adaptability of Teenagers

#### 3.3.1 Analysis of the Influence of Different Frequency Participation in Extracurricular Sports on Adolescent Social Adaptability

According to Table 1, with the increasing frequency of extracurricular sports, their social adaptability scores showed a trend of rising first and then decreasing. Through one-way variance analysis of the social adaptability of adolescents participating in extracurricular sports at different frequencies, the results are  $F=3.051$ ,  $\text{Sig.} < 0.05$ , indicating that adolescents participating in extracurricular sports at different frequencies, that is, participating in extracurricular sports at different frequencies has a significant effect on adolescent social adaptability.

Table 1: Analysis of the effects of extracurricular sports on adolescents' social adaptability

Participation frequency (weekly)	N	M±SD	F	Sig.	LSD
(1) 1-2 Times	106	42.5189±7.63978			
(2) 3-4Times	82	45.1098±7.80314	3.051	0.049	(1)<(2)
(3) Five times or more	32	44.9063±6.99013			

It is known from multiple comparisons that the social resilience of adolescents who participated in extracurricular sports at 3 – 4 times was significantly higher than that of those exercising at 1-2

times. Physical exercise plays an important role in improving the blood circulation of the brain and promoting the excitability of nerve cells. Reasonable exercise can make people awake and energetic, which is conducive to paying attention and improving the level of sensory perception, so as to improve the social adaptability [6, 7]. Therefore, teenagers should be encouraged to participate in a moderate frequency of extracurricular sports, preferably 3-4 times a week.

### 3.3.2 Analysis of the Influence of Extracurricular Sports Participation on Teenagers' Social Adaptability

In order to understand the influence of participating in extracurricular sports on adolescent social adaptability, and found that when the duration of extracurricular sports is less than 90min, their social adaptability scores is improved with the increase of sports duration. However, the number of teenagers who participated in extracurricular sports for more than 90min was 0, which limits further research on the influence of participating in extracurricular sports on the social adaptability of teenagers.

By not long in extracurricular sports youth its social adaptability of one factor variance analysis, the results,  $F=2.231$ ,  $Sig.> 0.05$ , shows that the youth to not long extracurricular sports its social adaptability there is no significant difference, namely each time in extracurricular sports time has no significant effect on adolescent social adaptability. Zhang Yingqiu, Kong Chuhui research shows that junior middle school male and female students in each exercise 75-90min social adaptation score is the highest, each exercise needs to reach a certain amount of exercise to make the body produce good adaptation change [8]. Therefore, the impact of participating in extracurricular sports on social adaptability should be further studied in the future.

### 3.3.3 Analysis of the Influence of Different Forms of Extracurricular Sports Participation on Teenagers' Social Adaptability

As shown in Table 2, the adolescents who participated in extracurricular sports by independent activities had the lowest level of social adaptability, while those who participated in extracurricular sports in the form of class and school activities had the highest level of social adaptability. Through one-way variance analysis of teenagers participating in extracurricular sports, the results showed that  $F=2.750$ ,  $Sig. <0.05$ , shows that teenagers participating in extracurricular sports social adaptability in different forms, namely participating in extracurricular sports in different forms has a significant influence on adolescent social adaptability.

Table 2: Analysis of the effects of different forms of extracurricular sports participation on adolescents' social adaptability

To participate in the form	N	M±SD	F	Sig.	LSD
(1) Club	8	43.2500±8.71370	2.750	0.044	
(2) Class and school activities	82	45.1098±7.20083			(2)>(4)
(3) Accompanied by others	107	43.7196±7.74815			(3)>(4)
(4) Activities alone	23	40.0000±7.85667			

Through multiple comparisons, it is known that the social adaptability of teenagers who participate in extracurricular sports in the form of class-school activities and accompanied by others is significantly higher than that of teenagers who participate in extracurricular sports alone.

There is no doubt that independent activities can give full play to their own subjective initiative, but independent activities lack of sports atmosphere, is not conducive to the development of interpersonal relations. Some studies have shown that students enrolled in collective or multiperson programs have significantly better socially adapted [9] than students enrolled in individual

programs. Extracurricular physical exercise can enhance the communication between students, improve the adaptability of the natural environment and social environment, cultivate the sense of cooperation, team spirit and responsibility [10]. The survey results show that the teenagers who participate in extracurricular sports have the highest level of social adaptability, so it is advocated that teenagers should participate in more class and school activities. Although in the form of clubs, clubs to participate in extracurricular sports together, but the survey in the form of club, the number of only eight people, the results of the accuracy of the study will cause certain influence, and liu yi [5] (2016), so in the form of clubs, clubs in extracurricular sports on the influence of youth social adaptability to be further research.

### 3.3.4 Analysis of the Impact of Different Sports Participation in Extracurricular Sports on Teenagers' Social Adaptability

In order to understand the influence of teenagers' participation in extracurricular sports with different programs on their social adaptability, it was found that teenagers who participated in extracurricular sports with martial arts programs had the highest social adaptability score, and those who participated in extracurricular sports with football programs had the lowest social adaptability score. Through the one-way variance analysis of the teenagers in extracurricular sports, the results,  $F=0.649$ ,  $Sig.=0.691 > 0.05$ , showed that in different extracurricular sports to the social adaptability of no significant difference, namely different extracurricular sports affect the social adaptability is not significant.

### 3.3.5 Analysis of the Influence of Participating in Extracurricular Sports with Different Intensities on Teenagers' Social Adaptability

According to Table 3, it can be seen that with the increase of extracurricular sports intensity, their social adaptability level shows a trend of rising first and then decreasing. Through the one-way variance analysis of the ability of adolescents participating in extracurricular sports, the results are  $F=2.656$ ,  $Sig. =0.049 < 0.05$ , indicating that there are significant differences in their social adaptability, namely that the intensity of extracurricular sports has a significant influence on adolescent social adaptability.

Table 3: Analysis of the effects of participating in extracurricular sports on adolescents' social adaptability

To participate in the intensity	N	M±SD	F	Sig.	LSD
(1) lesser	51	41.5686±8.35525	2.656	0.049	(1)<(3)
(2) moderation	116	43.9569±7.45117			
(3) larger	48	45.8333±7.09610			
(4) extra large	5	44.8000±7.52994			

Sports intensity is a classic training means used to improve the performance of athletes in the field of competitive sports, and also an important means used to improve the physical health level of children and teenagers in the field of physical education in China [11]. Through multiple comparisons, it is known that the social adaptability of adolescents who participated in extracurricular sports with greater intensity was significantly higher than that of adolescents who participated in extracurricular sports with less intensity. In his study, Ruskin found that exercise with moderate or above intensity can reduce panic and depression, and can effectively improve the self-confidence and self-esteem of the exercisers, thus producing a better mental health effect. The results of this survey show that the lowest in extracurricular sports and the highest in extracurricular sports with higher intensity. Therefore, teenagers should be encouraged to participate in

extracurricular sports with greater intensity.

## 4. Conclusion and Recommendations

### 4.1 Conclusion

(1) The level of adolescent social adaptability was slightly higher among boys than among girls, but there was no significant difference in social adaptability between male and female students.

(2) Different frequency, form and intensity of youth participation in extracurricular sports, Different scores on their social adaptation abilities, And had a significant difference, The main performance is that the students who participate in extracurricular sports have the highest social adaptability level for 3-4 times a week; Social fitness scores for participation in extracurricular sports in partnership were significantly higher than those in activity alone, And in the form of class, school activities to participate in extracurricular sports students have the highest level of social adaptability; When participating in extracurricular sports with less intensity, The lowest level of social adaptability, When participating in extracurricular sports with greater intensity, The highest level of social adaptability.

(3) Participating in extracurricular sports with different programs and hours has no significant impact on teenagers' social adaptability.

### 4.2 Suggestions

(1) In view of the problem of poor social adaptability of teenagers, the relevant departments of schools need to hold sports health lectures to let teenagers understand the relationship between extracurricular sports and social adaptability, so as to make it clear that they should pay attention to the frequency, form and intensity of sports when conducting extracurricular sports.

(2) The relevant departments of the school need to strengthen the construction of campus culture, create a good sports atmosphere for teenagers, and encourage teenagers to actively participate in collective extracurricular sports with moderate frequency and load.

(3) This study found that there were some differences in social adaptability among adolescents in different frequency, form and intensity of extracurricular sports, indicating that extracurricular sports have a certain influence on adolescents' social adaptability. However, whether there is a causal relationship between the two, and the strength of the relationship between the variables need to be further studied in the future.

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