

An investigation and research on influencing factors of college students' physical exercise

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ABSTRACT: College students' consciousness of physical exercise is so weak in recent years. The exercising habit is hard to form and physique conditions decline year by year. Combining practical teaching experience and considering influencing factors of college students, the author carries out an investigation and a statistical analysis on the college students' participation of physical exercise through methods of documents, questionnaire survey and mathematical statistics according to personalities of college students. The result indicates that the lack of fields and facilities, the lack of leisure time, the lack of companions, the lack of sport specialties and the lack of teachers' guidance and extracurricular sports competitions are major factors influencing physical exercise of college students. So, how to form the habit of college students participating in physical exercise should be re-examined so as to form the consciousness of lifelong physical exercise. A more particular knowledge of college students' awareness and needs of physical exercise provide references for sports work of colleges and universities, provide theoretical and practical supports for college students participating in physical exercise, and promote college students' development of qualities from all aspects.

Keywords: college student; participation; physical exercise; factors; investigation and research

1 INTRODUCTION

The sound development of college students' physique conditions cannot do without the attention of the government. In recent years, departments of the government introduces policies and measures continuously to accelerate sports work of colleges and carry out sunshine sport exercise energetically. Sports work of colleges has made a positive progress. It is proposed in *Suggestions of the General Office of the State Council on Strengthening School Sports and Promoting Students' Physical and Mental Health Development in an All-round Way* that the reform and development of school sports should be further promoted so as to improve students' physical and mental health and strengthen their physique conditions. Relevant content of teenager sports and school sports is mentioned in *The 13th Five-Year Plan of Sports Development* issued by State General Administration of Sports that teenager sports activities should be carried out extensively with improving teenagers' physique conditions as the objective. It is pointed out in *Suggestions of the*

State Council on Strengthening Teenager Sports and Improving Teenagers' Physique Conditions that the current and future general requirements of enhancing teenager sports work are: implement seriously the guiding ideology of putting health first, regard strengthening students' fitness as one of the basic goals of school education, establish and improve the sports work mechanism, guarantee PE classes and sports activities of students, carry out teenager sports activities and competitions in a large scale, reinforce the construction of sports health facilities and teaching staff, improve the teenager sports network involving schools, communities and families, cultivate a good habit of physical exercise and a healthy lifestyle for teenagers, form a healthy and optimistic atmosphere of loving sports and cherishing health in the whole society. Policies and measures further improve physical education and provide an effective guarantee for the improvement of students' physical fitness and health condition.

Both relevant departments and all sectors of the society pay close attention to the health condition of college students, which concerns not only the all-round development of college students but also the

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quality of talents required by the continuous development of the nation, as well as the great undertaking of constructing a harmonious society and realizing “the Chinese Dream”. The condition of participating in physical exercise decides physique conditions of college students. It has become a key point of physical education in colleges that physical quality of students should be enhanced constantly and the cultivation of the habit of participating in physical exercise should be promoted. This is of an important strategic significance.

2 CURRENT SITUATION OF COLLEGE STUDENTS PARTICIPATING IN PHYSICAL EXERCISE

With the continuous deepening of the sports teaching reform in colleges and universities, physical education curriculum is also improved constantly, which further reflects the concept of “putting people first”. Students are able to participate in teaching activities of physical education curriculum in the “three independences” learning model. It is far from further improving college students' physical and mental development and achieving the objective of lifelong exercise that students participate in PE class only once a week. Physique condition and immunity of college students decline continuously in recent years. The situation of college students participating in physical exercise determines their physique condition. Therefore, the continuous improvement of college students' health condition and the promotion of the cultivation of physical exercise have become the top priority of educational work in China.

There are still many problems in the process of encouraging college students to participate in physical exercise. For example, the lack of attention on cultivating students' interest in active participation in physical exercise in physical education, the prejudice on physical exercise, the lack of various forms of sports activities, etc. These problems have seriously affected college students in the participation of physical exercise. College students should be clear that physical exercise is an essential activity of the extracurricular life. Physical exercise refers to sports activities that can be selected by people as needed through physical education means with natural force and healthy measures, the objectives of which are building up body, improving health, strengthening physique condition, regulating mental condition, enriching cultural life and spending leisure time. For this reason, colleges and universities attach great importance to students' extracurricular physical exercise, which is regarded as an important aspect of students' education and life. Physical exercise will develop in the direction of determining exercising goals independently, choosing exercise content independently and organizing exercise independently.

3 RESEARCH OBJECTS AND METHODS

3.1 Research objects

Research objects are students from five colleges in Zhuhai City of Guangdong Province.

3.2 Research methods

- (1) Documents: The author refers to relevant documents and academic literatures of college students' physical exercise so as to provide a scientific reference and theoretical basis for the research.
- (2) Questionnaire survey: 300 students are randomly selected from the five colleges for the questionnaire survey. 296 questionnaires are returned and the recovery rate is 98.7%. 292 questionnaires are valid and the valid recovery rate is 98.6%.
- (3) Mathematical statistics: All data collected from questionnaires are processed through mathematical statistics.

4 RESULT AND ANALYSIS

Ways of college students of participating in physical exercise are various. In physical exercise, some factors are inseparable while some factors have the effect of constraining. Active participation of college students in physical exercise has a positive effect on their health condition, a full use of spare time, the mobilization of learning initiative and the promotion of physical education in colleges. Therefore, college students' participation in physical exercise should have specified factors or conditions, as shown in Figure 1,

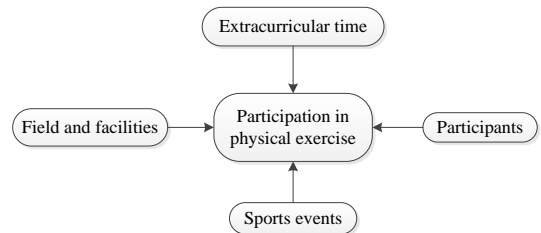


Figure 1. Specified factors of physical exercise

4.1 Statistics on the gender composition of research objects, referring to Table 1

Table 1. Statistical table of the gender composition of research objects

Gender	Male	Female
Number	144	148
Percentage	49.3%	50.7%

As shown in Table 1, the percentage of male is

49.3%, while the percentage of female is 50.7% in valid questionnaires. In the investigation, factors, such as fields and facilities, time, companions, sports specialties and teachers' guidance, have an obvious impact on male and female students' participation in physical exercise.

4.2 The factor of fields and facilities (see Table 2)

Table 2. Statistical table of the factor of fields and facilities

		Influencing degree of the factor of fields and facilities				
		Minimum	Small	Large	Maximum	Total
Male	Number	12	21	56	55	144
	Percentage	8.3%	14.6%	38.9%	38.2%	100.0%
Female	Number	16	43	54	35	148
	Percentage	10.8%	29.1%	36.5%	23.6%	100.0%
Total	Number	28	64	110	90	292
	Percentage	31.5%		68.5%		100.0%

As shown in Table 2, the factor of fields and facilities has an obvious impact on college students' participation in physical exercise (68.5%). The lack of fields and facilities is an external factor impeding college students' participation in physical exercise. Male students are particularly prominent in the investigation. 77.1% male students believe that their enthusiasm of participating in physical exercise is influenced by the factor of fields and facilities. Male students have a strong initiative in the participation of physical exercise as well as high requirements on fields and facilities. For example, in a basketball game, students focus on competition. However, grouped competitions of 20 students are carried out in a half basketball court. The long waiting time severely hinders the value and effect of exercise as well as their interest in physical exercise. 39.3% female students believe that the lack of fields and facilities has little effect on their participation in physical exercise. It indicates that female students have less requirements on fields and facilities because they can be engaged in other activities like calisthenics, sports dancing, shadowboxing, etc.

4.3 The factor of time (see Table 3)

Table 3. Statistical table of the factor of time

		Influencing degree of time factor				
		Minimum	Small	Large	Maximum	Total
Male	Number	9	11	58	66	144
	Percentage	6.3%	7.6%	40.3%	45.8%	100.0%
Female	Number	14	20	42	72	148
	Percentage	9.5%	13.5%	28.4%	48.6%	100.0%
Total	Number	23	31	100	138	292
	Percentage	18.5%		81.5%		100.0%

As shown in Table 3, the factor of time has an obvious influence on college students' participation in physical exercise (81.5%). College students have inadequate spare time so that they can hardly participate in physical exercise. In the investigation, most stu-

dents believe that excessive curricula and exams take up most of their spare time that should be spent on self-directed physical exercise. Yet, in research objects, 23% female students believe that the factor of time has little influence on their participation in physical exercise. In their opinion, they have spare time but it requires equitable distribution. The time conflict between time and physical exercise should be properly handled so as to alternate work with rest.

4.4 The factor of companion (see Table 4)

Table 4. Statistical table of the factor of companion

		Influencing degree of the factor of companion				
		Minimum	Small	Large	Maximum	Total
Male	Number	11	65	40	28	144
	Percentage	7.6%	45.1%	27.8%	19.4%	100.0%
Female	Number	16	17	54	61	148
	Percentage	10.8%	11.5%	36.5%	41.2%	100.0%
Total	Number	27	82	94	89	292
	Percentage	37.3%		62.7%		100.0%

As shown in Table 4, the factor of companion has a relatively obvious influence on college students' participation in physical exercise (62.7%). Most students believe that it feels lonely when they have no companions in physical exercise. The factor of time has a prominent impact on female students (77.7%). This is because most female students are introverted and difficult to participate in physical exercise with unfamiliar students. However, in the investigation, 52.7% male students believe that the factor of companion has little influence on their participation in physical exercise. They can participate in physical exercise without the company of familiar students and easily fit themselves in an unfamiliar environment.

4.5 The factor of sports specialty (see Table 5)

Table 5. Statistical table of the factor of sports specialty

		Influencing degree of the factor of sports specialty				
		Minimum	Small	Large	Maximum	Total
Male	Number	28	47	48	21	144
	Percentage	19.4%	32.6%	33.3%	14.6%	100.0%
Female	Number	11	19	71	47	148
	Percentage	7.4%	12.8%	48.0%	31.8%	100.0%
Total	Number	39	66	119	68	292
	Percentage	36.0%		64.0%		100.0%

As shown in Table 5, the factor of sports specialty has a prominent impact on college students' participation in physical exercise (64.0%). Most students believe that they are afraid to participate in physical exercise because they are not on top of a certain sports event and have no specialties. They are afraid of being laughed at by other students and lack the confidence in physical exercise. This has severely impeded the enthusiasm of physical exercise. But 52.0% male stu-

dents believe that the factor of sports specialty has a small impact on the participation in physical exercise. Male students of this kind do not have high requirements on their sports competence, who participate in physical exercise with the idea of focusing on participation and exercising.

4.6 *The factor of teachers' guidance (see Table 6)*

Table 6. Statistical table of the factor of teachers' guidance

		Influencing degree of the factor of teachers' guidance				
		Minimum	Small	Large	Maximum	Total
Male	Number	24	65	39	16	144
	Percentage	16.7%	45.1%	27.1%	11.1%	100.0%
Female	Number	9	17	46	76	148
	Percentage	6.1%	11.5%	31.1%	51.4%	100.0%
Total	Number	33	82	85	92	292
	Percentage	39.4%		60.6%		100.0%

As shown in Table 6, the factor of teachers' guidance has an obvious impact on college students' participation in physical exercise (64.0%). A majority of students believe that teachers' on-site guidance plays a positive role in students' participation in physical exercise. Teachers are able to organize and guide students to carry out physical exercise, instruct and correct technical errors in physical exercise, and teach more relevant theoretical knowledge of physical exercise. It is found in the survey that the factor of teachers' guidance has a large influence on female students' participation in physical exercise because female students have more requirements on teachers on-site instructions. As for male students, teachers' guidance is not so important for their participation in physical exercise. They believe that physical exercise should be more open and free and they feel constrained under instructions of teachers.

4.7 *The factor of extracurricular sports competition*

Table 7. Statistical table of the factor of extracurricular sports competition

		Influencing degree of the factor of extracurricular sports competition				
		Minimum	Small	Large	Maximum	Total
Male	Number	13	33	51	47	144
	Percentage	9.0%	22.9%	35.4%	32.6%	100.0%
Female	Number	25	43	49	31	148
	Percentage	16.9%	29.1%	33.1%	20.9%	100.0%
Total	Number	38	76	100	78	292
	Percentage	39.0%		61.0%		100.0%

As shown in Table 7, the factor of extracurricular sports competition influence college students' participation in physical exercise obviously (61%). Most students believe that various forms of extracurricular sports competitions can mobilize their activity and initiative of participating in physical exercise. The situation of the mass sports work can be examined

timely through extracurricular sports competitions, which is helpful to the sports exchange between teachers and students. Various kinds of extracurricular sports competitions in colleges are to the benefit of the popularization of different types of sports activities, which help to increase students' level of sports technique to some extent. Sports competitions are also help the formation of lifelong sports, providing favorable conditions for the development of mass sports in the future. It can be found from the investigation that the factor of extracurricular sports competition has a large impact on male students, who care about competition results. Thus, male students improve their sports ability and technique level by taking part in physical exercise actively. As for female students, the factor of extracurricular sports competition has a small impact on them. But they still have a positive attitude towards competitions.

5 CONCLUSION

There are a variety of factors influencing college students' participation in physical exercise. Four most prominent factors are concluded from questionnaires. The lack of fields and facilities, the lack of leisure time, the lack of companions, the lack of sport specialties and the lack of teachers' guidance and extracurricular sports competitions are major factors influencing physical exercise of college students. These factors are severely influencing and impeding college students' interest and initiative in participating in physical exercise. It is difficult to meet the requirements of college students in physical exercise. The overall promotion of sports work in colleges comes to a standstill, which severely influences the development of school sports, the physical and mental development of college students as well as the cultivation of lifelong sports consciousness. Therefore, it is necessary to pay attention to feelings of students after physical exercise and exert intervention in extracurricular physical exercise so as to guide students to choose group participation of physical exercise and increase the atmosphere of participating in physical exercise. In the meantime, it is necessary to emphasize and reinforce the cultivation of interpersonal skill so as to improve perseverance and persistence of college students' participation in physical exercise.

6 SUGGESTIONS

Enthusiasm and degree of college students' participation in physical exercise should be improved. Suggestions are concluded as follows:

- (1) Construct the correct sports cognition of college students, establish a correct sports view, inspire hobbies and interest in sports.
- (2) Schools should further improve the distribution

of sports fields and facilities in line with relevant documents of the Education Ministry of sports fields and facilities distribution standard. Emphasize the construction of sports fields, increase sports fields, make full use of available resources for development and reform, and add different types of sports fields. Increase the number and sort of sports facilities to meet the requirements of students in physical exercise.

(3) Educational administrative departments should arrange class time reasonably, giving back spare time to students as much as possible. Sports departments should also encourage and promote students to participate in extracurricular physical exercise.

(4) Encourage students to take part in physical exercise with the unit of class or to participate in physical exercise in the form of sports interest groups under the organization of sports departments and institutes.

(5) In physical education, PE teachers should not only pay attention to the cultivation of exercising consciousness but also teach special sports skills to students so that they can master one sports event or sports skill at least.

(6) Sport departments or sports associations of students should make plans for extracurricular sports competitions so as to encourage students to participate in physical exercise actively.

(7) Sports departments should not only appoint PE teachers to give instructions in sports fields but also mobilize players to instruct students in sports fields as instructors.

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