

Analysis of the Current Situation of Physical Exercise and Response Strategies for Master's Students in Schools

--Sichuan University of Science and Engineering as an Example

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Abstract

This paper analyzes the current situation of physical exercise and its influencing factors among master's students in Sichuan University of Light and Chemical Technology through literature, sample survey and mathematical statistics, and proposes effective strategies to deal with the problems. The results of the survey showed that the motivation of physical exercise of postgraduate students in Sichuan University of Light and Chemical Technology was mainly for physical exercise and weight loss, and the most important factors influencing physical exercise of postgraduate students in Sichuan University of Light and Chemical Technology were excessive pressure of scientific research and lack of sports companions.

Keywords

Sichuan University of Science and Engineering; Postgraduate students; Physical exercise

1. Introduction

With the booming development of higher education in China, the expansion of graduate students in successive years has marked that China's graduate education has entered a stage of rapid development, and with the expansion of graduate students, the issue of its educational quality has become increasingly prominent. In October 2020, the General Office of the CPC Central Committee and the General Office of the State Council issued the Opinions on Comprehensively Strengthening and Improving School Sports in the New Era, which pointed out that continuously deepening sports teaching reform, and encourage universities and research institutes to incorporate physical education courses into the public curriculum system of postgraduate education. The health condition of postgraduates is related to the qualification rate of national training of senior professionals and will directly affect the development of China's high-tech career. Paying attention to and improving the physical and mental health of master's students is a prerequisite to guarantee the role of master's students.

2. Objectives and Methods of the Study

2.1. Object of the Study

Physical exercise behavior of master students enrolled in Sichuan University of Light and Chemical Technology.

2.2. Research Methodology

2.2.1. Literature Method

The existing results and materials related to this study were collected and organized in China Knowledge Network, Vipshop database, and school library, etc., and classified, summarized and organized to provide theoretical support for this study.

2.2.2. Sampling Method

A total of 100 postgraduates were randomly selected from Sichuan University of Light and Chemical Technology, 100 questionnaires were distributed, 100 were collected, 100 were valid, and the efficiency rate was 100%.

2.2.3. Mathematical and Statistical Method

The results of the questionnaire were analyzed and processed using an Excel spreadsheet.

3. Results and Analysis

3.1. Analysis of the Current Situation of Postgraduate Students' Participation in Physical Exercise

3.1.1. Investigation and Analysis of the Motivation of School Graduate Students to Participate in Physical Exercise

According to Maslow's theory of hierarchy of needs, good motivation can serve as the driving force to strengthen physical exercise for school graduate students. At the same time, good motivation can effectively encourage school graduate students to participate in physical exercise and improve the motivation of the group, and grasp the motivation of school graduate students to exercise can better prescribe the right medicine. In this study, the following investigation was done to investigate the motivation of school graduate students to participate in physical exercise in Sichuan Light Chemical University.

Table 1. Survey on the motivation of enrolled graduate students to participate in physical exercise (n = 100)

Motivation	Weight loss	Participate in the competition	Responding to physical fitness tests	Relieving the pressure of research	Hobbies	Exercise
Number of people	60	4	0	6	10	20
%	60%	4%	0	6%	10%	20%

We can see through Table 1: the motivation of participating in physical exercise varies among school graduate students, among which, weight loss is the main motivation of participating in physical exercise among school graduate students, accounting for 60%, and physical exercise accounts for 20% of students, these two have occupied the vast majority of the entire exercise motivation, which indicates that everyone has paid enough attention to their physical health condition and is willing to take active ways to This shows that people have paid enough attention to their physical health and are willing to exercise in a positive way. In the column of hobbies and competitions, we find that the number is low, mainly because there are fewer sports activities for postgraduates in Sichuan Light and Chemical University, whether in school-level competitions or in provincial competitions, we seldom see the figure of postgraduates in school, and most of the teams are undergraduates. No one will participate in physical exercise in order to cope with the physical fitness test, and it is known that many universities do not have physical fitness test for enrolled postgraduates without any assessment pressure, which

leads to the fact that the willingness of enrolled postgraduates to actively participate in exercise is not so strong.

3.1.2. Investigation and Analysis of Time Spent on Physical Exercise By Graduate Students in School

Scientific physical exercise to ensure a certain amount of exercise time to achieve good results, for the time to participate in physical exercise, the following survey was conducted, the results are shown in the figure.

Table 2. Survey on time spent on physical exercise by enrolled graduate students (n = 100)

Time	0-30 minutes	30-60 minutes	60-90 minutes	Other
Number of people	28	50	12	10
%	28%	50%	12%	10%

From Table 2 we can clearly see: half of the students' exercise time in 30-60 minutes, this length is the exercise more advocated time, but also the exercise effect is better time. 28% of the students exercise time in the 0-30 minutes interval, many students' awareness stays on at least 30 minutes, than to this time to exercise, there is another reason is that many students do not have a long time to adhere to the habit of exercise. There are fewer students in the 60-90 minute exercise time range because many students' research tasks take up most of their time, leaving less time for exercise, and because a long time of exercise requires an athletic base, and few students have the physical fitness to maintain a long time of physical exercise.

3.1.3. Investigation and Analysis of the Frequency of Participating in Physical Exercise Among School Graduate Students

The frequency of participation in physical exercise is another effective indicator to evaluate the effect of exercise, in addition to the time of exercise, the frequency of exercise can reflect a person's exercise effect, but also to see a person's exercise habits. Reasonable and effective exercise frequency can bring good exercise effect, for this, we have conducted the following survey.

Table 3. Survey on time spent on physical exercise by enrolled graduate students (n = 100)

Frequency	1 time per week	2-4 times per week	5-7 times per week	Other
Number of people	21	48	15	6
%	21%	48%	15%	6%

From Table 3 we can conclude that: 48% of the students exercise 2-4 times a week, which is a more advocated and exercise effect of a better exercise frequency. The number of students who exercise once a week is also high, and the effect of exercising once a week is not ideal, and the frequency of exercise can be increased appropriately. Exercise 5-7 times a week that the students have developed good exercise habits, but it should be noted that the degree of exercise should be grasped, not "too", reasonable, scientific control of exercise frequency to achieve the best exercise effect.

3.1.4. Investigation and Analysis of the Items Chosen By the Graduate Students in School to Participate in Physical Exercise

Generally speaking, people will choose their favorite sports to exercise, and in this special environment of the school, people choose exercise programs not only because of hobbies and interests, but also by the influence of the courses offered by the school, the restrictions of the

venue and equipment, etc. The following is a survey on the selection of sports exercise programs for graduate students.

Table 4. Survey on the choice of sports and exercise programs for enrolled graduate students (n = 100)

Projects	Running	Jump rope	Swimming	Basketball	Soccer	Badminton	Table Tennis	Gym	Other
Number of people	27	18	6	20	10	6	6	7	0
%	27%	18%	6%	20%	10%	6%	6%	7%	0

From Table 4, we can see that the exercise program chosen by the graduate students in Sichuan Light Chemical University is richer. Running is a good aerobic exercise, and the exercise effect is obvious; influenced by the school curriculum and competition, there are more students who like basketball, and most of them are male; 18% of students choose rope skipping, and some students participate in swimming, badminton and table tennis.

3.1.5. Investigation and Analysis of the Choice of Venue for Physical Exercise By Graduate Students In School

The sports field largely determines the choice of sports, and the perfect infrastructure can provide convenience and guarantee for the exercise of graduate students. The function and availability of school grounds directly affect the frequency and effect of students' participation in physical exercise. Adequate and perfect sports grounds will have a positive impact on students' participation in physical exercise, while on the contrary, the lack of the function of exercise grounds will bring negative impact on students' participation in physical exercise.

Table 5. Survey on the choice of venues for physical exercise by enrolled graduate students (n = 100)

Location	School Venues	Dormitory and available open space	Gym	Other
Number of people	62	21	12	5
%	62%	21%	12%	5%

From Table 5, 62% of the students choose school venues for physical exercise, 21% choose to exercise in the dormitory or available open space, 12% choose to go to the gym, and very few students choose other places. Of course, some students are willing to spend money to go to the gym to receive professional fitness guidance, some students do not have high requirements for physical exercise venues, and very few students will choose other places for physical exercise, which indicates that the venues for physical exercise of graduate students are not limited to the campus.

3.2. Investigation and Analysis of Factors Influencing the Participation of Graduate Students in Physical Exercise

The factors that affect the participation in physical exercise of school graduate students in Sichuan Light and Chemical University are diverse, variable, and full of uncertainty. Venue, equipment, weather, and school policies can affect the behavior and effect of school students' participation in physical exercise, as shown in Table 6.

Table 6. Survey of factors influencing physical exercise among enrolled graduate students (n = 100)

Impact Factors	Scientific Research Pressure	Network Factors	Lack of Peers	Economy Reason	Dislike Movement	Lack of Time
Number of people	16	8	11	12	16	37
%	16%	8%	11%	12%	16%	37%

From Table 6, we can see that: the factors affecting the participation in physical exercise of postgraduates in Sichuan University of Light and Chemical Technology show diversified characteristics. Among them, 37% of the students gave up physical exercise because of time limitation, 16% of the students were affected by the pressure of research, 12% of the students had part-time jobs after school to reduce the pressure of studying, which would also occupy their exercise time, 11% of the students gave up physical exercise because of the lack of companions, and 8% of the students preferred relaxation methods such as video games. Thus, it seems that the environment will affect the physical exercise of graduate students in tangible or intangible ways, and in the future, the influence of social environment on the participation of graduate students in physical exercise will be various.

4. Conclusions and Recommendations

4.1. Conclusion

4.1.1. Findings on the Motivation of School Graduate Students to Participate in Physical Exercise

According to the previous survey, we can conclude that: the motives of participating in physical exercise for graduate students in school are diversified, and most of them are for weight loss and physical exercise, which shows that contemporary graduate students possess health awareness and have autonomous behaviors to promote health, which is worthy of affirmation and promotion.

4.1.2. Conclusion of the Time Spent on Physical Exercise by School Graduate Students

Half of the students can grasp the exercise time, 30-60 minutes of exercise time is more advocated and exercise effect is better, and the control of time is not very good students mainly for the following reasons: one is not to develop a systematic exercise habits, resulting in the distribution of exercise time is not even and reasonable, and the second is because of the exercise time in the understanding of certain misconceptions, need to be corrected in a timely manner The second reason is that there are some misconceptions about exercise time, which need to be corrected in time.

4.1.3. Conclusion on the Frequency of Physical Activity Participation Among School Graduate Students

Nearly half of the students participate in physical exercise 2-4 times a week, which is a more scientific and reasonable choice, and the exercise effect is also more ideal. Some students exercised 1 time per week, which may not be ideal for exercise effect. The exercise 5-7 times a week is relatively demanding on the physical quality, and there should be a scientific control of the exercise load, otherwise it is easy to cause sports injuries.

4.1.4. Conclusion of the Selected Items of Physical Exercise for School Graduate Students

The projects of physical exercise for graduate students show diversified characteristics, with running ranking first with its advantages of low cost and easy to start, followed by basketball due to the influence of school sports events, jumping rope and soccer are also the projects that

students are happy to accept, and fewer students choose swimming because of sports technology and other reasons.

4.1.5. Conclusion on the Selection of Venues for Physical Exercise By School Graduate Students

The university's venues are unquestionably the first choice for students to exercise, followed by the dormitories and available open spaces, with some students choosing the gym, which also shows that contemporary graduate students are willing to invest in their health and their consumption patterns are gradually changing.

4.1.6. Conclusion of the Factors Influencing the Participation in Physical Exercise by School Graduate Students

The main factor affecting the participation of graduate students in physical activity is the lack of time, followed by the pressure of research, and from a psychological point of view, the lack of peers also becomes one of the main influencing factors.

4.2. Recommendations

4.2.1. National Level

Currently, there are few colleges and universities that offer graduate physical education courses, and there is no physical fitness test for graduate students. 2021 During the two sessions, a member put forward a new proposal: "It is suggested that graduate students be included in the scope of physical fitness test and relevant standards be introduced" To take "cultivating people" The core standard for measuring the quality of universities is to fully reflect the importance of talent training quality in the index system. To "train people with sports" means to return to the origin of sports and take enhancing students' physical fitness as the fundamental starting point and anchor point. In the National Fitness Plan (2021-2025), it is clearly proposed to improve the teaching mode of physical education in schools, ensure the daily exercise time for students, establish and improve the evaluation system of physical health of postgraduates, and consider incorporating the results of physical health evaluation of postgraduates into the evaluation system of postgraduate training quality in colleges and universities.

4.2.2. School Level

From the school level, Sichuan Light Chemical University is currently in the stage of running multiple campuses, the school should organize relevant sports courses, sports events and activities, sports training, sports lectures, etc. for our students and the actual situation of the school in a purposeful, organized and planned way, the most direct and effective way is to offer sports courses for graduate students, the setting and selection of sports courses can be more flexible, set a reasonable set of assessment standards at the end of the semester or academic year, and include physical education scores in the comprehensive quality assessment of students. In addition, schools should maximize students' exercise needs, improve the utilization rate of school grounds and equipment, actively participate in various school sports events, increase students' interest and enthusiasm in exercising, and enhance their physical health, and schools should not only "teach" students, but also build a platform for students to The school should not only "teach" students, but also build a platform for students to "play often".

4.2.3. Student Level

From the student level, we should establish the right motivation and health awareness, actively participate in sports, taking into account the theory and practical knowledge, and better improve our own health. Teachers "teach", we should do "diligent practice", in order to better "often race", so that sports really benefit the students.

At present, there is still a big gap in physical education for postgraduates, and the monitoring and mastering degree of physical quality of postgraduates in schools is far less than that of undergraduates, so it is important to improve the attention to the physical health level of postgraduates, to establish a sound monitoring system, and to guard the last gate when students come out of school.

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