Survey on Outdoor Mountaineering Participation of College Students in Beijing

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ABSTRACT
The research targets on college students of China University of Geosciences in Beijing, Capital Institute of Physical Education, Capital Normal University and Beijing Language and Culture University in the way of questionnaire survey and then conducts date analysis and organization. To develop knowledge, we consult a large quality of materials on out-door sports and literature and periodicals on mountaineering, and then do the research from different angles including factors, having influence on the participation of college students in out-door mountaineering, as cognition, individual physical condition, mountaineering equipment, safety, economic condition, time, and participation form and motivation. It is expected to have a certain degree of understanding on current situation of outdoor mountaineering in Beijing universities and provide reference for following mountaineering research in order to improve and promote the healthy development of this sport in colleges and universities.

Keywords: outdoor sports, college students, mountaineering, influence factors

I. INTRODUCTION

A. Background of the development of outdoor sports
China's outdoor sports starts late, and mountaineering is just carried out for a short time in most universities, but it develops rapidly. In 1958, CUGB established the first mountaineering team and trained piles of outstanding climbers. With the continuous advancement of China's reform and opening up together, our economic develops and people’s living standard grows. What’s more, people pursue higher quality of life, so the awareness of participating in outdoor sports is constantly increasing. Mountaineering is close to nature, entertaining body and mind, and cultivating sentiment. It is full of challenges and adventures and has gradually been accepted and loved by the public. College students, as the most active participants and builders of socialism with Chinese characteristics in the new era, play an important role in promoting the development of outdoor mountaineering.

In the early 21st century, the Chinese Ministry of Education issued social documents related to outdoor sports, and it explicitly mentioned in the document that education should make full use of outdoor natural environment resources and widely carry out outdoor adaptive teaching and training. At the same time, outdoor sports have also achieved greater and faster development under the joint efforts of China's nation, society and individual, and have been valued and developed in many universities. At present, many universities in Beijing have opened or are preparing to open outdoor optional courses for public or compulsory courses for sports majors.

On March 24, 2015, at the meeting of the Political Bureau of the Central Committee, the "Opinions on Accelerating the Construction of Ecological Civilization" was adopted, and the concept of the two mountains was written into the Central Document as an important guiding ideology for the party and the state to guide China in promoting the construction of ecological civilization. The report of the 19th National Government of China once again proposed the construction of ecological civilization, providing an important direction for the harmony between man and nature and the development of outdoor sports and fatherly promoting the development of mountaineering. President Xi proposed an important two-mountain theory — the green mountains and clean waters are gold and silver mountains. Through a series of policies and legal measures, detailed ecological civilization construction measures have been proposed, such as accelerating the establishment of legal systems and policy guidance for green production and consumption; raising pollution emission standards, strengthening the responsibility of polluters, and improving environmental credit evaluation and information compulsory disclosure and severe punishment systems; completing of the three control lines of ecological protection red line, permanent basic farmland, urban
development boundary; reforming the ecological environment supervision system and so on. Build a beautiful China, realize the fundamental improvement of the ecological environment in 2035, and achieve the goal of the realization of beautiful China. As an active participant in the construction of ecological civilization, outdoor sports play an important and positive role in the development of China’s economy and the construction of ecological civilization.

Mountaineering is an important part of outdoor sports and plays an important role in the promotion and development of outdoor sports. According to the data, outdoor sports develop better in western developed countries, Japanese and Korea, which takes up higher proportion in their economy, and plays an important role in promoting economic development. Mountaineering outdoor education has a long history and a wealth of theoretical foundations and practical experience, which promotes the healthy and rapid development of outdoor mountaineering. Among them, outdoor education plays an indelible role in it, and it is an important part of education in some western developed countries. It plays an important role in the promotion and development of outdoor mountaineering and has achieved good results. China is the biggest developing country with rapid development. Obviously, the emerging outdoor industry has huge growth prospects and market potential.

B. Advantages of outdoor sports in Beijing universities

Beijing is a first-tier developed city which has numerous universities and great population and high developed sports industries. Except, there are abundant mountain resources around China and Beijing, such as the Yanshan Mountains, the Himalayas, the Kunlun Mountains, the Tianshan Mountains, the Tanggula Mountains, the Qilian Mountains and the Hengduan Mountains. The Yanshan Mountains are located in the north of Beijing. They are mainly low-altitude peaks, which are more than two kilometers above sea level, like Wuling Mountain, Haitang Mountain, Hanhaillang and Da Nan Mountain etc. China has sovereignty and shared sovereignty of 9 mountains over 8000 meters — there are 14 like that high in total all over the world. These superior natural conditions provide a huge market and development prospect for the launch of outdoor mountaineering in Beijing. Mountaineering is a multi-faceted factor for our body. It is an aerobic and strength-training sports. One can adjust the amount of exercise and exercise intensity according to his physical strength and physical fitness. Appropriate mountaineering activities are beneficial to physical and mental health, so it has been sought after by the majority of teachers and students. It can be said that mountain climbing is a more comprehensive and stimulating exercise.

II. THE DEFINITION OF MOUNTAINEERING

By consulting relevant literature on the Internet, we learn that mountaineering is a sport that climbs from low-altitude terrain to high-altitude peaks under specific requirements. In order to facilitate the research, this paper divides mountaineering into two categories: high-altitude mountaineering adventure and fitness mountaineering from broad perspective and from the purpose of mountaineering respectively.

Among them, the high-altitude mountaineering expedition is relatively dangerous, difficult and challengeable. It needs to be overcome with the help of professional equipment to overcome various natural conditions and to reach the peak. According to the Chinese Mountaineering Association and the majority of outdoor mountaineering enthusiasts to understand high-altitude mountaineering activities, it is generally believed that the peaks faced by high-altitude mountaineering expeditions are often above 3,500 meters above sea level, and often covered with snow. This form of exercise shows people that confrontation with the natural environment is relatively high, requiring advanced preparation and adaptive training, depending on the height and the level of environmental agility.

Fitness mountaineering activities and high-altitude mountaineering adventure activities have obvious characteristics of safety and ease of use, so they are popular among mountaineering enthusiasts, and occupy a large proportion in outdoor mountaineering activities. For this mountaineering activity, it is generally carried out in the form of a walking team. Generally, the altitude of the mountain peaks is not more than 3,500 meters. This mountainous terrain is widely distributed on the vast land of China. What’s more, these mountains are closer to cities and the traffic is relatively convenient. In outdoor mountaineering practice activities, fitness mountaineering activities can be well combined with other outdoor sports to achieve strong physical fitness, enjoyable body and mind, broaden vision, strengthen harmony between man and nature, awe and enhance environmental awareness etc.

III. RESEARCH OBJECT AND METHOD

The research targets on the students of Capital Institute of Physical Education, Capital Normal University, Beijing Language and Culture University and China University of Geosciences (Beijing). According to the purpose of studying outdoor mountaineering and sports science research, the questionnaires were designed and then delivered to the students at random by SO JUMP and paper questionnaires.

160 questionnaires were distributed in the field, and 49 questionnaires were withdrawn. A total of 209
questionnaires were distributed. In fact 201 were actually withdrawn including 196 available questionnaires. The withdrawn rate was approximately 96.17%. The objects are total 196 students in different universities in Beijing. 104 male students, accounting for 53.06%; 92 female students, accounting for 46.94%. The overall male-female ratio is moderate, close to 1:1.

Thereof, freshman accounts for 2.04%, sophomore 12.24%, junior 14.29%, senior 20.41% first-year graduate student 30.61%, second-year graduate student 18.37% and third-year graduate student 2.04%. The number of seniors and graduates is 100, reaching 51.02% of the total number of the questionnaires. Their age is mainly from 19 to 24 years old, accounting for 75.51% of the total.

Office 2016 to conduct multi-faceted and multi-angle analysis of the collected data is used, and important information is extracted, analyzed and processed, and the problem is judged. Based on the theory of probability, the statistical method is used to study the data to derive its regular results.

IV. MAIN FACTORS AFFECTING THE PARTICIPATION OF STUDENTS IN CONTEMPORARY COLLEGES IN OUTDOOR MOUNTAINEERING

A. Cognitive factors

According Through questionnaire survey, most college students have a strong interest in mountaineering, which is very interesting, accounting for 44.9%, interested in 34.69%, a little interest accounted for 12.24%, only 8.16% of respondents said Not interested, the data shows that most college students are very interested in mountaineering, but the survey found that only 36.73% of the schools have outdoor climbing courses or lectures. Most people are not very good at outdoor mountaineering. Understand the situation, fail to have a good and effective understanding of the value and basic knowledge of mountaineering, and understand the ways of mountaineering through network materials, campus clubs and off-campus clubs, which are occupied by off-campus clubs and campus clubs. 65.3%. In the choice of ways to understand outdoor mountaineering, the proportion of personal physical factors is 75.51%, important 22.45%, not important or unclear 2.04%. However, only 61.22% of people insist on daily and regular physical exercise, 36.73% occasionally and a small part failed. In the survey of what do you think is the possible reason if someone does not like mountain climbing, the proportion of personal physical factors is up to 71.43%. The physical condition greatly affects participants’ participation in high altitude. Mountain climbing with certain difficulty and irritability has affected the high-altitude mountaineering experience of mountain climbers to some extent.

B. Personal physical factors

A healthy body is the basis for participating in sports activities. According to the questionnaire data, most of the respondents believe that strong physical condition plays an important role in participating in outdoor mountaineering. It is considered that the physical condition is very important for participants in outdoor mountaineering. The proportion is as high as 75.51%, important 22.45%, not important or unclear 2.04%. However, only 61.22% of people insist on daily and regular physical exercise, 36.73% occasionally and a small part failed. In the survey of what do you think is the possible reason if someone does not like mountain climbing, the proportion of personal physical factors is up to 71.43%. The physical condition greatly affects participants’ participation in high altitude. Mountain climbing with certain difficulty and irritability has affected the high-altitude mountaineering experience of mountain climbers to some extent.

C. Mountaineering equipment factors

With the advancement of technology, the professionalism of mountaineering equipment has become stronger and stronger, and more and more types have made mountain climbing more convenient and comfortable. So some unreachable peaks have become a possibility. In the investigation of the importance of outdoor equipment to outdoor mountaineering, 44.9% of the respondents believe that mountaineering equipment is very important and 53.06% of that believe it is important, while only 2.04% think that mountaineering equipment is of general importance or not. However, only a small number has complete equipment. Comfortable and effective mountaineering equipment, to a large extent, decides the fun and benefits for mountaineering participants when participating in mountaineering.

D. Security factors

As an important prerequisite for sports activities, safety plays an important role in the development of outdoor activities. In the investigation of safety factors in outdoor mountaineering, we found that 69.39% have safety knowledge of outdoor sports, and 30.61% do not or are not clear. For the necessity of safety measures in outdoor mountaineering, the respondents basically maintain a supportive attitude: 77.55% consider it is very necessary, 22.45% necessary. For the safety of outdoor mountaineering, there are many unpredictable factors because it is outdoors, and the location is generally far from the city center. Therefore, the
outdoor mountaineering sports have higher security risks than other school sports. But any organization-type sports activity inevitably has certain security risks. Since the risk of outdoor climbing is relative so it can be decreased through careful planning and careful preparation, even infinity approaches zero.

E. Economic factors
In the survey of college students, the main sources of economic life of college students are as follows: relying on parents- 24.49%, on part-time work to independently maintain university expenses- 10.2%, or on part-time and parental giving- 59.18%, 6.12% by other means. Their discretionary funds are relatively limited. In the investigation of whether it is costly for outdoor mountaineering, we found that 42.86% agree that outdoor mountaineering is very expensive; 24.49% expensive; 22.45% a bit of expensive and 10.2% not costly. On the whole, it is generally believed that mountaineering needs a large expenditure and requires a lot of financial support. And equipment is an important expenditure thereof. Regarding the survey of how much one is willing to pay for outdoor mountaineering, we found that 67.35% of the participators are willing to offer not more than 2000 yuan, 18.37% less than 200 yuan, 26.53% from 200 yuan to 500 yuan, 22.45% 501 yuan to 2000 yuan, 32.65% more than 2000 yuan. After investigating the price of outdoor equipment, it was found that two thousand yuan can only meet several equipment, which is far from professional complete equipment. In short, money problem still affects a lot for college student in mountaineering.

F. Time factors
In the investigation of the factors influencing the time of participation in mountaineering activities, it is founded that college students who have at most 2 days every month to participate in outdoor account for 40.82%, four days for 32.65%, six days for 16.33% and over eight days for 10.2%. College students can participate in outdoor mountaineering for a relatively long time, but for many days in a row, there are fewer free time, mainly for one day and two days. However, the location of mountaineering activities is generally far away from school, and it takes a long time, from one day to several weeks. Especially for high-altitude mountaineering activities, it often takes many days, and even up to several months. In short, time has a great effect for college students in mountaineering activities.

G. Participation form factors
In the investigation of if you want to participate in outdoor mountaineering, what kind of form will you choose to participate in, 59.18% choose to participate in school outdoor community. Motivation is an inner motivation to engage in a certain activity. Through the questionnaire, the mountaineering enthusiasts participating in spontaneous mountaineering activities account for 36.73%, and off-campus clubs only accounts for 4.08%. For groups that participate in outdoor mountaineering in the form of spontaneous organization, general participants’ skills and physical quality vary, and the preparations are also different. They are gathered together by their preferences, which is more blindness and impulsiveness, and weaker to withstand risks so the risk of safety doubles. In the statistics of the analysis of outdoor sports accidents in China in 2017, the proportion of personal behaviors, family and friends organization has reached 67.82%. The club generally has less contact with students in school. Although it is relatively professional and safe, it costs a lot and is relatively low.

H. Motivation factors
Regarding the motivation survey, it was found that 73.47% of the climbers’ first aim was to enjoy the beauty of. After that, it is 67.35% for self-confidence, 65.31% for release pressure, 55.1% for outdoor life experience, 38.78% for companion friends, 36.73% for self-enrichment, 26.53% for exercise, and 4.08% for body shape, of which the smallest proportion is molded, only 4.08%.

I. Identification of various factors
For the question of “what do you think may be the reason why some people do not like mountain climbing?”, we found that the reason is of personal physical factors accounting for 71.43%, cognitive factors for 57.14%, economic factors for 48.98%, security factor for 38.78%, time factor for 38.78%, motivation factor for 24.49%, participation form factor for 20.41%, and mountaineering equipment factor for 18.37%.

V. CONCLUSIONS AND SUGGESTIONS
A. Conclusions
First, most of the college students have experience in mountaineering, but there is relatively little understanding of mountaineering. For the influence of mountaineering, the physical condition and cognitive factors of the participants account for a large proportion, and the ratio is more than half. They know it mainly from campus clubs and off-campus clubs. The main ways of participation are fitness and low-altitude mountaineering activities.

Second, as a college student, although the economic source is diverse and the disposable income relatively increases, the relatively high security of outdoor mountaineering, and the requirements for equipment quality and practicality are extremely strict, so that it invisibly increases the cost of mountaineering. Except,
as the difficulty increases, the cost also increases. Economic factors play an important role in the development of mountaineering. Among the eight major influencing factors, economy ranks third, accounting for nearly half.

Third, when it comes to sports, safety must be the first consideration. Unsafe mountaineering gets two tears of loved ones. So the importance of safety is clearly evident. The factors affecting mountaineering in the survey statistics ranks fourth. But the degree of emphasis on safety is relatively low, lack of preventive measures, and awareness of security.

Fourth, mountaineering activities are mostly carried out in the suburbs. It takes a relatively long time. College students, due to academic and employment pressures, have less free time, just one or two days, and have less free time for consecutive days. For high altitude and long distance mountaineering activities, the time factor is an important factor. Among the eight major influencing factors in the survey, it ranks fifth.

Fifth, motivation as an intrinsic motivation to participate in sports activities plays an important role in promoting the participation of college students in mountaineering activities. Appreciating the beauty, challenging yourself, releasing stress, and experiencing outdoor life are its main motivation. Companionship, enrichment, and exercise also account for a large proportion. Motivation factors will also be an important direction for mountaineering promotion.

Sixth, if a worker wants to do something well, he must first sharpen his weapon. So the equipment for mountaineering plays an indelible role in the successful, safe and effective development of mountaineering activities. In the survey of eight factors affecting mountaineering, it is paid little attention. The main reasons are related to the difficulty of mountaineering activities, altitude, and length of time and so on.

B. Suggestions

Here are some countermeasures for promoting college students' participation in physical exercises in contemporary colleges and universities.

First, Interest comes from knowledge. Qualified colleges and universities can open outdoor compulsory courses in sports related majors, train professional students' backbone schools, and promote and standardize mountain climbing based on campus communities and clubs. For non-related majors, the school can offer some optional courses related to mountaineering for interested students to choose, conduct related lectures or push related lectures and knowledge, and increase the awareness of teachers and students on outdoor mountaineering.

Second, it is necessary to strengthen exercise, enhance physical fitness, and create a positive exercise atmosphere. It's necessary to organize various sports activities based on schools, colleges, societies, and classes, etc. to increase students' participation in physical exercise opportunities, to develop a shared economy, and seek funding from schools based on associations and clubs, scientific research groups, commercial companies, social groups and students to maintain the purchase and replacement of basic mountaineering equipment. Also, sufficient funds can also gain further development.

Third, safety issues are much more important than everything. Participants must strengthen organizational management, standardize equipment use, enhance safety awareness, make appropriate plan and prepare, purchase insurance to share accident risks, train professional leaders, obtain relevant qualification certification, establish multi-level and multi-type outdoor mountaineering programs, and streamline the cost of activities on the condition of sharing economy so as to provide a safe, secure and professional mountaineering experience. According to schools' teaching arrangements and the conditions of college students, low-altitude hiking activities in Beijing and surrounding areas can be organized on Sunday, while high-altitude mountaineering adventures during long holidays. Safety propaganda should be strengthened to resist spontaneous organized mountaineering, cultivate students' outdoor mountaineering backbones, and standardize mountaineering activities together with teachers' guiding.

Fourth, it is necessary to promote professional campus professional communities and clubs to organize mountaineering activities. The content of outdoor mountaineering should also be enriched to meet the needs of different individual motives, and focus on the key points, develop the benefits of outdoor mountaineering sports such as close to nature, challenging yourself, enjoying life and so on.

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