

Research on the Development of Rock Climbing in Universities of Zunyi City

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Abstract

The improvement of people's living standard has promoted the development of rock climbing, and it has become one of the outdoor sports favored by college students. In order to understand the actual situation of the development of rock climbing in Zunyi city, the students and teachers participating in rock climbing in five universities in Zunyi city were investigated by means of literature and questionnaire. Based on the investigation and analysis of the course development, teachers and students' participation of rock climbing in colleges and universities in Zunyi city, this paper puts forward some countermeasures to promote the development of rock climbing in colleges and universities in Zunyi city. Suggestions: In the process of improving the comprehensive teaching ability of rock climbing teachers in Zunyi city, promote the cooperation and communication between colleges and universities in Zunyi city; Increase capital investment, actively improve the existing site equipment and management ability of the lack of science and technology to improve the content of rock climbing to meet the needs of the rapid development of university rock climbing.

Keywords

Zunyi City; Universities; Rock climbing; Development countermeasures.

1. Introduction

The most remarkable feature of human beings is that they live in groups, which is a social attribute formed in the process of production and life communication. Families, classes, campuses and so on are the concrete manifestations of the formation of a social group, and college sports associations are also the manifestations of group shaping and determination, which affect every student participating in physical exercise in the community, and are an important place for college students' daily learning and exercise. With the rapid development of college sports associations, the impact on College Students' physical exercise is gradually increasing. Students can also master more experience in the process of carefully managing associations, and lay a solid foundation for subsequent development. Rock climbing has the characteristics of entertainment, fitness, competition and so on. It is deeply welcomed by college students and condenses their publicized personality. After rock climbing entered colleges and universities, it was warmly pursued by the majority of students. In 2003, the rock climbing branch of the college students' Sports Association was established, providing a good platform for promoting the rapid development of rock climbing in Colleges and universities [1,2]. However, due to the different understanding of regional environment, educational thinking and economic conditions, the development of rock climbing in Colleges and universities is unbalanced. In the process of development, there are still some problems that need to be solved urgently. There are also some problems in rock climbing in local colleges and universities. Based on the investigation and Research on the development status of rock climbing in Colleges and universities in Zunyi City, this paper summarizes and analyzes the

existing problems according to the participating students, teachers and infrastructure, and puts forward targeted improvement suggestions.

2. Research Objects and Methods

2.1. Research Objects

The research on the development of rock climbing in Colleges and universities in Zunyi City takes the students and teachers who participate in rock climbing in five colleges and universities in Zunyi City as the objects of investigation.

2.2. Research Methods

2.2.1. Literature Study

By summarizing the survey data on rock climbing in major universities and consulting relevant data, we can have sufficient literature support in the process of this survey. According to the content of the analysis literature, we can sort out the literature that can help the development of rock climbing in Colleges and universities in Zunyi City, master the direction of relevant research, and provide theoretical reference for the writing of subsequent papers [3,4].

2.2.2. Questionnaire Survey

In order to understand the current situation of the development of rock climbing in Colleges and universities in Zunyi City, questionnaires were distributed to students and teachers participating in rock climbing in some colleges and universities in Zunyi City [5,6]. 120 student questionnaires were randomly selected and distributed, 116 student questionnaires were recovered, and 110 valid questionnaires were available. The recovery rate was 96.6% and the effective rate was 91.6%. The number of teachers' questionnaires distributed was 12, the number of returned questionnaires was 12, and the number of effective questionnaires was 10. The recovery rate was 100%, and the effective rate was 83.3%.

2.2.3. Data Statistics

Organize the surveyed data with relevant software, and provide support for the problems in this survey after calculating the percentage [7,8].

3. Research Results and Analysis

3.1. Analysis on the Development of Rock Climbing Courses in Zunyi City

Table 1. Statistics of rock climbing courses (N=5)

College or university	Curriculum
Zunyi Medical University	Yes
Zunyi Medical And Pharmaceutical College	No
Medicine & technology college of Zunyi Medical University	No
Zunyi Normal University	Yes
Zunyi Vocational and Technical College	No

According to the investigation on rock climbing in Zunyi colleges and universities, it is found that two of the five colleges and universities in Table 1 are carrying out rock climbing teaching activities. In table 1, only Zunyi Medical University and Zunyi Normal University have carried out the teaching content of rock climbing, while the other three universities have not set up relevant courses. It can be seen that the development of rock climbing is relatively unbalanced and lacking, which will affect the overall development effect of rock climbing in Zunyi universities as a whole.

Table 2. Statistics of rock climbing course details (N=5)

College or university	Course form	Course nature	Course students	Class hour
Zunyi Medical University	Compulsory courses	Specialized course	Social sports guidance and management	18
Zunyi Medical And Pharmaceutical College	No	No	No	0
Medicine & technology college of Zunyi Medical University	No	No	No	0
Zunyi Normal University	Compulsory courses	Specialized course	Social sports guidance and management	128
Zunyi Vocational and Technical College	No	No	No	0

At present, the development of rock climbing in Colleges and universities in Zunyi city is still relatively slow, and many requirements can not be compared with colleges and universities that have developed for a long time. However, with the continuous implementation of rock climbing courses, it is believed that more rock climbing talents will be cultivated in the near future. In the investigation on the opening of rock climbing courses in Colleges and universities in Zunyi City, as shown in table 2, Zunyi Medical University takes rock climbing as a compulsory and optional course, Zunyi Normal University as a compulsory course, and the other three colleges and universities do not carry out teaching. As for the arrangement of class hours, the arrangement of class hours is far from enough. It is necessary to further increase the teaching content and class hours, actively popularize and promote rock climbing, and promote the development speed of rock climbing in Zunyi colleges and universities.

Table 3. Times of students participate in rock climbing training every week (N=110)

Options	Less than 2 times	3 times	4 times	More than 5 times
Number	63	28	19	0
Percentage (%)	57	26	17	0

The overall situation of rock climbing teams reflects the teaching effect of rock climbing in Colleges and universities, but students need to participate in rock climbing training regularly. In the survey on the number of times students participate in rock climbing training every week, as shown in Table 3, 57% of students will participate in rock climbing training twice a week or less, 26% of students will participate in rock climbing training three times a week, and 17% of students will participate in rock climbing training four times a week. From the above survey results, it is found that the number of college students in Zunyi participating in rock climbing training is not many, which is not conducive to college students' mastery of rock climbing skills and theoretical knowledge.

Table 4. Number of students participating in rock climbing competitions (N=110)

Options	1 times or less	2 times	3 times	4 times	5 times or more
Number	68	20	14	8	0
Percentage (%)	62	18	13	7	0

The results of the competition can also reflect the effect of rock climbing in Colleges and universities. In the survey on the number of students participating in rock climbing competitions, as shown in Table 4, 62% of the students have participated for one time or less, 18% of the students have participated for two times, 13% of the students have participated for three times, and the number of participants for more than five times is 0. Through the analysis of the above survey results, it is found that the current number of college students in Zunyi participating in rock climbing competitions is relatively small, which will not only affect the students' mastery of rock climbing skills, but also affect the publicity effect of rock climbing. We should actively organize the exchange of rock climbing events to improve the continuous development of rock climbing in Colleges and universities in Zunyi City.

3.2. Analysis of Student Participation

Students' love of rock climbing is directly related to the overall development effect of rock climbing. In Table 5, a survey is conducted on the love of Zunyi college students for rock climbing. Among them, 14% of the students like it very much, 11% of the students do not like it very much, and 5% of the students do not like it. From the analysis of the above survey results, it can be concluded that most students prefer rock climbing, and only a small number of students do not like rock climbing. If the school wants to promote the overall development effect of rock climbing, it needs to know the students' love for rock climbing, so that it can take effective measures to promote the popularization of rock climbing in Zunyi colleges and universities.

Table 5 Students' preference for rock climbing (N=110)

Options	Very like	Like	Quite like	Not really like	Unlike
Number	15	51	26	12	6
Percentage (%)	14	46	24	11	5

Motivation is the motivation to promote students to participate in rock climbing. The differences among students also affect students' motivation to participate in rock climbing. In Table 6, according to the investigation on the motivation of Zunyi college students to participate in rock climbing, the top three motivations with the largest number of students are taking credits, understanding rock climbing and mastering sports skills. The number of students selected is 95%, 90% and 87% respectively. The motivation to choose a small number of people is to participate in rock climbing competitions, and only 6% of the people choose. From the above survey results, it can be seen that the motivation of college students in Zunyi City to participate in rock climbing is relatively diverse, but the concept of credit needs to be modified. The school should actively carry out the publicity of rock climbing, change the concept of College Students' participation in rock climbing training, and make rock climbing develop rapidly in Zunyi City.

Table 6. Students' motivation of the participation (N=110, Multiple choices)

Options	Number	Percentage
Learn about rock climbing	99	90
Pursue individuality	42	38
Challenge new projects	44	40
Increase stamina	62	56
Master motor skills	96	87
Exercise willpower	66	60
Credits	104	95
Hobby	47	43
Enhance communication	32	29
Competition	7	6
Other	22	20

The harvest of students' participation in rock climbing reflects the effect of the development of rock climbing in Colleges and universities in Zunyi. In Table 7, a survey is conducted on the harvest of Zunyi college students' participation in rock climbing. 21% of the students have improved their self-confidence and enterprising spirit, 20% of the students have improved their physique, and 19% of the students have improved their physique. The number of students with enhanced sense of balance was 15%, while the number of students with reduced sense of stress was 12%, and the number of students with enhanced body softness and sense of coordination was 9%. Through the analysis of the above survey results, it is found that students have improved in varying degrees by participating in rock climbing, which shows that the implementation of rock climbing has a certain effect on the improvement of College Students' comprehensive quality.

Table 7. Gains from students' participation (N=110)

Options	Number	Percentage (%)
Self confidence and enterprising spirit	23	21
Improved body shape	22	20
Physical fitness has been improved	21	19
Enhanced sense of balance	16	15
Stress relief	13	12
Increased softness and coordination	10	9
Other	5	4

In Table 8, according to the survey of Zunyi university students' satisfaction with rock climbing teachers, 11% of the students are very satisfied with the teachers' rock climbing teaching, 33% of the students are satisfied with the teachers' rock climbing teaching, and no students are not very satisfied or dissatisfied with the teachers' rock climbing Teaching activities. From the above survey results, it can be seen that the effect of the current teachers is fairly good, but there is still much room for improvement in combination with the basic status of teachers. It is necessary to actively improve the comprehensive strength of teachers in rock climbing, so as to lay a solid human foundation for the development of rock climbing in Zunyi colleges and universities.

Table 8. Students' satisfaction degree with teaching abilities (N=110)

Options	Very Satisfied	Satisfied	Quite Satisfied	Not really Satisfied	Dissatisfied
Number	12	36	62	0	0
Percentage (%)	11	33	56	0	0

Site and equipment is the basic condition for rock climbing [9,10]. In Table 9, according to the survey of Zunyi college students' satisfaction with the site equipment of rock climbing class, 21% of the students were very satisfied, 29% were satisfied, 34% were relatively satisfied, and 16% were not very satisfied. From the above survey data, some students are not very satisfied with the site equipment for rock climbing courses provided by colleges and universities, which indicates that colleges and universities in Zunyi need to strengthen the construction of site equipment in order to ensure that students have enough sites for rock climbing training.

Table 9. Students' satisfaction degree with site and equipment (N=110)

Options	Very Satisfied	Satisfied	Quite Satisfied	Not really Satisfied	Dissatisfied
Number	23	32	37	18	0
Percentage (%)	21	29	34	16	0

4. Conclusion and Suggestion

On the whole, Zunyi colleges and universities have few or no rock climbing competitions in terms of carrying out rock climbing. The development of associations is relatively lacking. Zunyi colleges and universities have certain advantages in terms of academic qualifications and age of rock climbing teachers, but the lack of professional rock climbing teachers will affect the effect of rock climbing teaching. Zunyi college students have a certain understanding of rock climbing, and their acceptance is relatively high. However, some students do not like rock climbing, and think that the significance of rock climbing is not great. Zunyi college students are less satisfied with the rock climbing facilities provided by the school.

The suggestions are as follows. Holding relevant events and activities to promote rock climbing. Improving the comprehensive teaching strength of College Rock Climbing teachers in Zunyi City. Actively carrying out cooperation and exchange between colleges and universities. Increasing capital investment and improve logistics support services.

References

- [1] S.H. Lin, T.M. Wu: Feasibility analysis of rock climbing in Colleges and universities in Guangzhou, Research on ice and snow sports innovation, 2021 (20): 185-186.
- [2] J. Wigglesworth: The cultural politics of naming outdoor rock climbing routes, Annals of Leisure Research, 2021: 1-24.
- [3] N. Draper, D. Giles, N. Taylor, et al.: Performance assessment for rock climbers: the international rock climbing research association sport-specific test battery, International Journal of Sports Physiology and Performance, 2021, 16(9): 1242-1252.
- [4] L. M. Boggess, G. R. Harrison, G. Bishop: Impacts of rock climbing on cliff vegetation: A methods review and best practices, Applied Vegetation Science, 2021, 24(2): e12583.

- [5] M. Kim, C.D.D. Rupprecht, K. Furuya: Typology and perception of informal green space in urban interstices: a case study of Ichikawa city, Japan, *International Review for Spatial Planning and Sustainable Development*, 2020, 8(1): 4-20.
- [6] Y. Zheng, H. Ke: The adoption of scale space hierarchical cluster analysis algorithm in the classification of rock-climbing teaching evaluation system, *Journal of Ambient Intelligence and Humanized Computing*, 2020: 1-9.
- [7] D. S. Borden, S. Mahamane: Social marketing and outdoor recreational advocacy groups: Lessons from a rock climbing campaign, *Journal of Outdoor Recreation and Tourism*, 2020, 29: 100262.
- [8] K. N. Oriol, J. W. Kanupka, A. T. Fuehrer, et al.: The impact of a rock climbing program for adolescents with autism spectrum disorder: A pilot study, *International Journal of Kinesiology in Higher Education*, 2018, 2(4): 113-126.
- [9] J. Huang, Y. Ping, M. Zhu: Research and Development of Network Teaching Platform for Rock Climbing Course in Colleges and Universities, *International Conference on Applications and Techniques in Cyber Security and Intelligence*. Springer, Cham, 2021: 698-704.
- [10] M.De Salvo, G. Grilli, S. Notaro, et al.: Do risk perception and safety of sites influence rock climbing destination choices?, *Journal of Outdoor Recreation and Tourism*, 2022, 37: 100486.