

## *Retraction*

# **Retracted: Ice and Snow Sports Education Based on 5G Cloud Computing to Improve the Social Adaptability of Southern University Students**

### **Scientific Programming**

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

### **References**

- [1] D. Zhang and C. Xia, "Ice and Snow Sports Education Based on 5G Cloud Computing to Improve the Social Adaptability of Southern University Students," *Scientific Programming*, vol. 2021, Article ID 3828624, 12 pages, 2021.

## Research Article

# Ice and Snow Sports Education Based on 5G Cloud Computing to Improve the Social Adaptability of Southern University Students

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With the rapid development of the internet, the 5G cloud computing environment is gradually replacing the traditional computing environment. The social adaptation level of college students in this environment is an important indicator of whether college students can effectively integrate into the society. This article aims to study the design and reform of ice and snow sports education in the 5G cloud computing environment to enhance the social adaptability of college students. On this basis, in order to improve the social adaptability of southern university students, research on ice and snow sports education is proposed. This paper uses the literature method to study the characteristics of ice and snow sports education and the training model of social adaptability, constructs an experimental study on improving the social adaptability of southern college students, analyzes the overall impact of college students' participation in ice and snow sports education on social adaptability, and compares the situation with college students' participation in different sports to improve social adaptability. The social adaptability of college students from the lower grades to the upper grades is gradually enhanced, and the social adaptability score of boys is 35.8, the score of girls' social adaptability is 33.7, and the scores of boys are higher than those of girls.

## 1. Introduction

In today's society, competition is fierce, and everyone must adapt to this social environment. Strong social adaptability of students is the ladder and foundation to integrate well into the society. College students should effectively grasp this period and cultivate their social adaptability. The teaching method of physical education is different from other courses, and it has a good effect on the cultivation of students' social adaptability. Therefore, this article has very important significance and research value for the research of college physical education and the cultivation of college students' social adaptability.

Social adaptability is one of the basic qualities required by college students, and it is also an important part of higher-quality education for college students. Strong social adaptability is the ladder and foundation for students to integrate well into society. In university, cultivating strong

social adaptability can help college students to enter society smoothly, cultivate good interpersonal relationships, and gradually lead to success in life. Ice and snow sports are an important part of sports in North China University. The introduction of ice and snow training courses strengthened the students' physique and stimulated the enthusiasm of college students. Rich and diverse teaching methods, strong competition, and entertainment are students' favorites. According to the current demand for economic and social development talents, Southern University has innovated the ice and snow education methods and methods based on physical and mental health, developed the characteristics of ice and snow sports teaching, actively implemented curriculum education reforms, and actively implemented students' social adaptation education and training that should be unified; in the ice and snow sports training, infiltrate high-quality education, antishock ability education, mental health education, innovation and entrepreneurship

education, ideological and political education, etc. The practice of winter ice and snow sports makes the talents cultivated by the university have excellent social adaptability and better promotes economic and social development.

Yang is constantly advancing and deepening the reform of physical education in our country today. Innovative education has become a new development direction of education. School physical education urgently needs to carry forward the teaching method that integrates theory with practice and continuously innovate in teaching methods to cultivate more adaptability. High-quality compound sports talents needed by all sectors of society. Using literature analysis, logical induction, etc., it analyzes the creative concepts and challenges faced by physical education and proposes theoretical and practical innovations in physical education methods from the aspects of rationally determining the physical education process, implementing emotional physical education, and designing physical education classroom teaching. However, his research cannot fundamentally solve the current problems of physical education [1]. Van Tuan's adaptation to learning activities plays a very important role in the academic performance of first-year students. In order to have targeted solutions to improve the adaptability of first-year students to learning activities, it is necessary to find out influencing factors. This research aims to explore the factors affecting the learning adaptability of first-year students at the Vietnamese University of Labor and Social Affairs and to find ways to improve students' learning adaptability. Methods: this study adopts quantitative research methods, taking first-year students from Vietnam University of Labor and Social Affairs as the research object and surveying 300 students. Pearson's correlation coefficient test and linear regression analysis were performed on the research results. Main research results: the research results show that students' adaptability to learning activities is affected by many different factors; subjective factors such as motivation, learning methods, skills, etc., have a great impact on students' learning behavior. However, his research did not fully consider the combined influence of internal and external factors [2]. The development of Ardianto's e-sports education is not only playing games, but also various forms of education such as entrepreneurship, development, marketing, and scientific research for the purpose of training skills and providing knowledge. The opinions expressed by the public can take the form of support, criticism, and input. In order to distinguish between positive and negative sentiments, a large number of comments need to be accurately analyzed. This research aims to measure people's views on e-sports education or distinguish between positive and negative emotions in order to obtain valuable information from social media. The research was obtained through social media on Twitter. This research uses classification algorithms, naive Bayes and support vector machines. Through the comparison of the two algorithms, the prediction results show that the accuracy of the naive Bayes algorithm with SMOTE is 70.32%, and the AUC value is 0.954. The accuracy rate of SMOTE support vector machine is 66.92%, and the AUC value is 0.832. From these results, it can be seen that the

naive Bayes algorithm has higher calculation accuracy. However, his educational research results cannot fully explain the actual application situation, nor has it changed the traditional e-sports education method [3].

The innovations of this article are as follows: (1) the combination of qualitative research and quantitative research, and adequate analysis of research data; (2) the combination of theoretical research and empirical research, based on the discussion of physical education theory, combined with ice and snow sports empirical investigation and analysis of the actual situation; and (3) innovatively adding ice and snow sports to the winter exercise courses of southern colleges and universities, providing a new alternative way to improve the social adaptability of college students.

## 2. Research Methods of Ice and Snow Sports Education on Improving the Social Adaptability of Southern College Students

*2.1. Ice and Snow Sports Education.* Universities in the north, especially those in the three northeastern provinces, have made full use of natural advantages, combined with specific geographical conditions, cold winter, long snowfall, and ice and snow characteristics and provided various ice and snow training courses [4]. For example, some universities provide educational content such as ice hockey, speed skating, ice dancing, skating, and snowball, and some schools provide courses such as durability skiing, curling, and ice and snow activities. Combining the characteristics of ice and snow, students have the opportunity to build themselves on ice and snow, cultivate self-confidence, show themselves, and fully grow [5].

Ice and snow sports education has the following characteristics:

- (1) Adaptability: most of the ice and snow courses are conducted outdoors in the cold, and students must endure long-term low-temperature tests. As a result, the ability of students to adapt to harsh environments has been greatly improved, and students have the endurance and toughness that are not afraid of severe cold and difficulties [6].
- (2) Exercise: most of the snow and ice routes provided by the university are outdoors with fresh air. Appropriate winter sports can promote the body's metabolism and improve the physical condition of students. In addition, outdoor aerobic exercise can concentrate students' energy and attention for a long time, and help students effectively improve their academic performance [7].
- (3) Recreation: all kinds of ice and snow sports have a certain degree of entertainment and appreciation. For example, skating is a combination of aesthetics and sports elements, which brings people a happy mood. Students can not only appreciate the visual beauty brought by ice and snow in the first-class compulsory courses but also learn the ice and snow culture [8].

- (4) Competitiveness: all sports are competitive, and ice and snow sports are no exception. In the education process, teachers can improve the effect of education and cultivate team spirit through competition. The spirit of cooperation and fair competition of college students can fully stimulate students' defying characteristics and teamwork ability [4].
- (5) Educational: ice and snow training has the characteristics of humanitarian education. The ice-snow route combines local characteristic culture and modern elements to improve students' humanitarian literacy, cultivate outstanding personalities, adjust their psychological imbalances, and promote the overall development of college students.
- (6) Normativeness: the normative characteristics of ice and snow sports, precisely under the strict ice and snow sports system and evaluation criteria, make ice and snow sports training very attractive and attractive [5].

Figure 1 shows the main features of ice and snow sports education.

Ice and snow sports are a kind of humanistic sports. They have a strong humanitarian atmosphere and characteristics that promote the development of people and society. The main target of ice and snow sports teaching is students, who cultivate and form characteristics in the learning process of students. If there is no student as the main body, then this kind of education will no longer exist. Ice and snow sports training must be based on the students' sports and social development needs [9]. In the process of ice and snow sports training, students gradually established the concept of humanitarianism to meet humanitarian needs [10]. The humanitarian value of ice and snow sports education refers to the importance and value of ice and snow sports education in the development of society and people. The human value of ice and snow education is not only related to the social status of ice and snow education in society, but also related to the development momentum of ice and snow education. Only through a correct understanding of the humane value of ice and snow sports education can the society and students' sports education needs be met [11].

In essence, sports are the pursuit of the organic unity of body and health, the pursuit of self-cultivation, and the common progress of physical function [12]. Ice and snow sports give full play to the functions of strengthening the body, alleviating emotions, promoting communication, and improving students' awareness of physical conditions. Improve your own comprehensive quality, nurture your own powerful strength to overcome the difficulties in life, strengthen the spiritual strength of students, cultivate students' innovative spirit, cherish the body, and enhance personality [9, 13]. In the training process of ice and snow sports, pay attention to the physical development of students, give full play to the main role of students, so that the physical and mental health of students can be well developed, and combine the physical and mental health of students to give full play to the infinite possibilities of students

Through ice and snow sports education to guide students to learn to unite, learn to be a person, learn to adapt to society, and be a useful and valuable talent for society [14, 15].

## 2.2. Social Adaptability

*2.2.1. Brief Description of Social Adaptability.* Adaptation was first used in biology, which mainly refers to the purpose of adapting to the environment and survival by changing its own structure and function [16]. Later, this concept was introduced into the social environment, specifically referring to the process of human beings adapting to the social system of the natural and social environment. Some scientists have also put this concept that is called "debugging"; the common denominator is that the changes themselves to their own environmental action adaptation of the play interaction between people or groups [17].

In sociology, social adaptation refers to the process by which individuals or groups adjust their actions in order to adapt to the social environment. That is different from the process of biological adaptation to the natural environment. The new "social adaptation" education goal proposed in the "Outline" is to emphasize the social adaptation value of sports. The focus is on the way the individual enters the collective life-psychological adaptation in physical movement [18].

The process of social adaptation is the process of personal socialization, and social adaptation is not an empty abstract concept. The process of social adaptation is essentially a process of continuous socialization of individuals [11]. In order to become a social person, biologists must adapt to the social changes in which they live, gradually form concepts, adjust interpersonal relationships in communication and interaction with people, learn social roles and social relationships, and learn to experience various failures [19]. At the same time, we must realize that we must deal with various contradictions, learn to reconcile and adapt in the process of personal socialization, learn cooperation and competition, learn various rules and values, and accept various differences in society [20]. What is particularly important in the process of physical education is competition and adjustment, victory and defeat, the desire to win and the boundaries of rules, sensibility and rationality, and complex interactions. Contrary to the various characteristics of the educational process itself, sports promote socialization of the individual. It has an irreplaceable and unique effect in improving social adaptability [21].

The improvement of social adaptability is a natural person who consciously maintains social order through social education, values, and behavioral standards, starting with children and slowly learning social knowledge. Sports activities play an important role in improving people's social health and becoming social people. In sports, we must abide by the rules of the game and maintain the order of the game. This kind of awareness and action of interaction, cooperation, competition, and compliance with the rules of sports activities will be combined with daily social life and applied to study and work, which will help cultivate social adaptability.

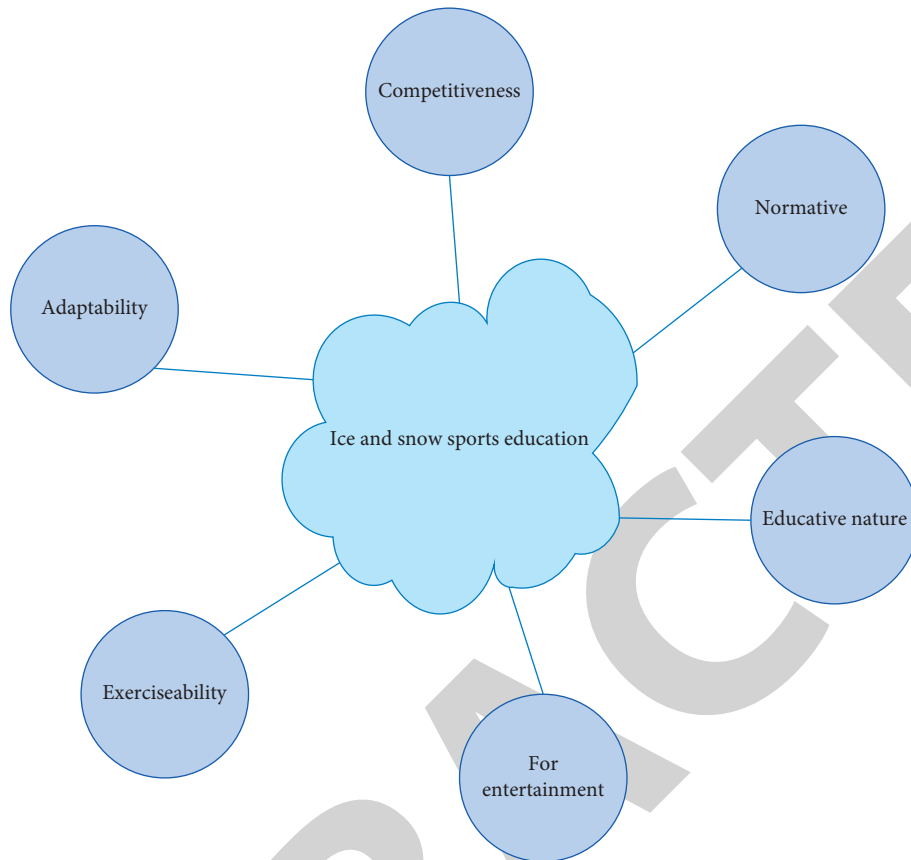


FIGURE 1: The main characteristics of ice and snow sports education.

*2.2.2. The Relationship between Physical Exercise and Social Adaptability.* Physical exercise helps to improve social adaptability. The role of sports in educating people is to take social responsibility. Society is an interactive part composed of political, economic, cultural, and other factors. Everyone plays one or more social roles. In society, in various situations, being connected with people of various identities, adapting to various social environments, and the ability to respond appropriately and quickly is an important manifestation of social responsibility. Sports activities can provide a higher environment and suitable conditions to teach people to learn to assume social roles. For example, in a basketball game, after a specific class is divided into groups, the various roles in the team, the wingers, center forwards, and guards of each group are in their respective positions, and mutual social relations are established through appropriate roles. In the social relationship created by sports, every role has the right to win, the right to win prizes, and the right to take technical actions in accordance with the rules. At the same time, it also has the obligation to comply with sports law, ethics, and technical regulations. Social role is to integrate social forms and individual actions necessary for social activities. Through the research on the role of sports, students realize that the role of society is a series of rules and obligations consistent with the role of sports. Action mode is people's expectation of individual actions with specific identities. This helps people understand the social concept of

“what is like what” and lays an ideological foundation for their own work in order to adapt to the needs of various groups in society in the future. Through physical exercise, college students can play a variety of roles through personal efforts, and they can also experience an important method of changing social status and understanding social conditions through personal subjective efforts. This is especially important for modern young people.

Sports activities cultivate people's adaptability to social rhythms. With the further deepening of social opening up, the pace of economic growth has accelerated, and the pace of social movements has changed from slow to fast. From the perspective of increasing labor productivity, the average annual growth rate of primitive society is 1–2%, the average growth rate per 10,000 years of slave society and federal society is 4%, and the annual growth rate of capitalist society is 3%. Today's annual growth rate is 6–10% or more. The rapid increase in labor productivity and the continuous decrease in spare time will inevitably lead to the acceleration of work and life. The high-speed social rhythm not only brings material wealth and spiritual wealth to the society, but also brings people many health problems such as psychological stress and depression. Sports and recreational activities are important tools for people to adapt to the new rhythm of life. Some social experiments and studies have shown that athletes and people who regularly participate in sports have a strong ability to adapt to their own changes and

able to master the rhythm of life well. This is because in sports activities, people have a variety of activity skills and quick action methods. It helps people avoid unnecessary activities and become out of control and complete various production and life activities correctly, coordinately, and quickly. Exercise can accelerate the operation of the human nervous system and cardiovascular system and can also improve the body's social adaptability. Decompression through sports can not only help relieve social pressure, reduce anxiety, and achieve the purpose of relaxation but also can stabilize the physical and mental emotions, enhance confidence, and improve social resilience in the long term.

### 2.3. Data Analysis Algorithm

**2.3.1. The Principle of Logistics Regression and Zero-Width Space.** The main idea of using logistics regression for classification is to establish a regression formula for the classification boundary line according to the existing data to classify. The term "regression" here comes from the best fit, which means to find the best fitting parameter set. The prediction function formula is

$$\sigma(z) = \frac{1}{1 + e^{-z}}. \quad (1)$$

Cost function is

$$\sum_{i=1}^m (y^{(i)} \log h_{\theta}(x^{(i)}) + (1 - y^{(i)}) \log(1 - h_{\theta}(x^{(i)}))). \quad (2)$$

The minimum value  $J(\theta)$  obtained by the gradient descent method is

$$\theta_j := \theta_j - \alpha \sum_{i=1}^m (h_{\theta}(x^{(i)}) - y^{(i)}) x_j^{(i)}, \quad (j = 0, 1, \dots, n). \quad (3)$$

The process of training the classifier is to use the optimal algorithm to find the best fitting parameters. First of all, a suitable prediction function  $h$  is needed, which is also a classification function. It is used to predict the judgment result of the input data to construct a cost function (loss function), which represents the difference between the expected output ( $h$ ) and the training data category ( $y$ ). This may be the difference between the two ( $h-y$ ). Fully consider the "loss" of all training data, that is, the total cost or average cost, and record it as a function  $J(\theta)$ . This represents the deviation of the estimated value of all training data from the actual category. Obviously, the lower the value of the function  $J(\theta)$ , the more accurate the prediction function (i.e.,

the more accurate the function  $h$ ). Therefore, it is necessary to find the minimum value of the function  $J(\theta)$  in this step [22].

**2.3.2. Decision Tree.** The decision tree is a tree structure (may be a binary tree or a nonbinary tree). Each nonleaf node represents a function test, each branch represents a range of specific function output values, and each drawing node stores a category. The process of using the decision tree to make a decision is to start from the root node, confirm the corresponding function of the classification item, select the output area according to the value, and use the category stored in the drawing node as the decision result.

Information gain:

$$I(x_i) = -\log_2 p(x_i). \quad (4)$$

Calculate entropy:

$$H = -\sum_{i=1}^n p(x_i) \log_2 p(x_i). \quad (5)$$

In the decision tree, let  $D$  be the division of training tuples by categories; then the entropy of  $D$  is expressed as

$$\text{info}(D) = -\sum_{i=1}^m p_i \log_2(p_i). \quad (6)$$

Now, we assume that the training tuple  $D$  is divided by attribute  $A$ ; then the expected information of  $A$  divided by  $D$  is

$$\text{info}_A(D) = \sum_{j=1}^v \frac{|D_j|}{|D|} \text{info}(D_j). \quad (7)$$

The information gain is the difference between the two:

$$\text{gain}(A) = \text{info}(D) - \text{info}_A(D). \quad (8)$$

The advantage of this method is that the computational complexity is not high, the output result is easy to understand, it is not sensitive to the lack of intermediate value, and it can handle irrelevant feature data. It can be used for classification and regression.

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}. \quad (9)$$

Naive Bayes is not sensitive to missing data, and the algorithm is relatively simple, and it is often used for text classification.

Gaussian normal polynomial distribution:

$$P(X_1 = n_1, \dots, X_k = n_k) = \begin{cases} \frac{n!}{n_1! \dots n_k!} p_1^{n_1} \dots p_k^{n_k}, & \sum_{i=1}^k n_i = n, 0, \text{ other wise.} \\ 0, & \text{other wise.} \end{cases} \quad (10)$$

Bernoulli distribution:

$$\frac{n!}{r!(n-r)!}p^k(1-p)^{n-k}. \quad (11)$$

### 3. Experimental Research of the Winter Sports Education to Enhance the Ability of the South Students of Social Adaptation

#### 3.1. Physical Education Culture of Snow and Ice on the Ability to Adapt to College Students

**3.1.1. Improve Students' Social Adaptability through Humanity Training.** In the current course guidance process for college students, we should not only focus on cultivating students' high-quality education content, but also focus on cultivating students' humanistic qualities. The so-called humanized cultivation refers to the cultivation of human nature and society. In the guidance process of ice and snow sports courses, colleges and universities need to pay attention to improving students' comprehensive quality and learning awareness. For example, in a speed skating class, the content of speed skating can improve the learning ability of students, thereby forming a more challenging course teaching.

**3.1.2. Realize the Humanized Mode of Teaching Methods.** As an intuitive type of sports, ice and snow sports are rich in content, providing students with a good sports education experience. The creation of course content reflects the importance of students, emphasizes the student's dominant position, and converts traditional passive learning methods into active learning methods to create relaxing and comfortable education courses. Throughout the education implementation process, pay attention to the changes in student feelings over time. Consider the adaptability of students. At the same time, in the education process, physical education teachers must respect students, improve their learning awareness and self-improvement awareness, so that students can form an optimistic and self-confident mental state in the learning process and fully adapt to the development needs of students. Therefore, in the entire education process, the basic connotation of ice and snow sports must be emphasized to stimulate students' conscious desire to learn.

**3.1.3. Establish a Humane Teaching Evaluation System.** The humanized education evaluation system should fully consider students' autonomy and interest in learning in the course evaluation process and fully consider the quality of students, physical education, and personal development. Pay attention to students' learning achievements and implement differentiated and personalized education models. At the same time, in the course content evaluation process, students must fully integrate their daily academic performance and test results to establish a complete course evaluation model. Through the establishment of a humane teacher evaluation system, the differences between students can be found in a

short time, laying a good foundation for the overall growth of students.

Figure 2 shows the research direction of ice and snow sports education on the cultivation of college students' adaptability.

#### 3.2. Experimental Design to Enhance the Capacity of the South Students Study Social Adaptation of Snow Sports Education

**3.2.1. Research Object.** The research object selected in this article is based on the impact of ice and snow sports education on improving the social adaptability of southern college students. Affect the situation.

#### 3.2.2. Research Methods

- (1) *Literature Data Method.* This article has consulted a large amount of data and references, including CNKI, Wanfang Thesis Database, and Chinese Sports Journals, and organized a large amount of relevant information through the above channels.
- (2) *Expert Interview Method.* The questionnaire survey in this article consulted many experts and scholars and revised and improved them under their guidance. In addition, I also consulted physical education experts in universities, communicated with them, absorbed their suggestions and opinions, combined with the actual situation, and completed the research of this article.
- (3) *Questionnaire Survey Method.* According to the purpose of the research, a random sampling method is adopted to select some students from southern universities as the survey objects.
- (4) *Mathematical Statistics.* Use mathematical methods, Excel software, sports statistics, and SPSS statistical software to analyze, classify, and organize data, and use graphs to reflect the survey results.

### 4. Research Situation of Ice and Snow Sports Education on Improving the Social Adaptability of Southern College Students

**4.1. Status Quo of Domestic Research on Physical Education for Improving College Students' Social Adaptability.** In order to understand the current status of domestic physical education research on the number of literatures on improving college students' social adaptability, this article selects the period from 2008 to 2018 as the time limit, selects "title" as the search term, and selects social adaptability as the "search topic." The full-text database and excellent paper database of Chinese journals, the search results show that a total of 1,692 papers have been published in China, including 1,494 papers, 4 doctoral papers, and 194 master papers. As shown in Table 1 and Figure 3, this paper compares the publication year of books and periodicals and the number of documents to form a distribution of the number of documents on

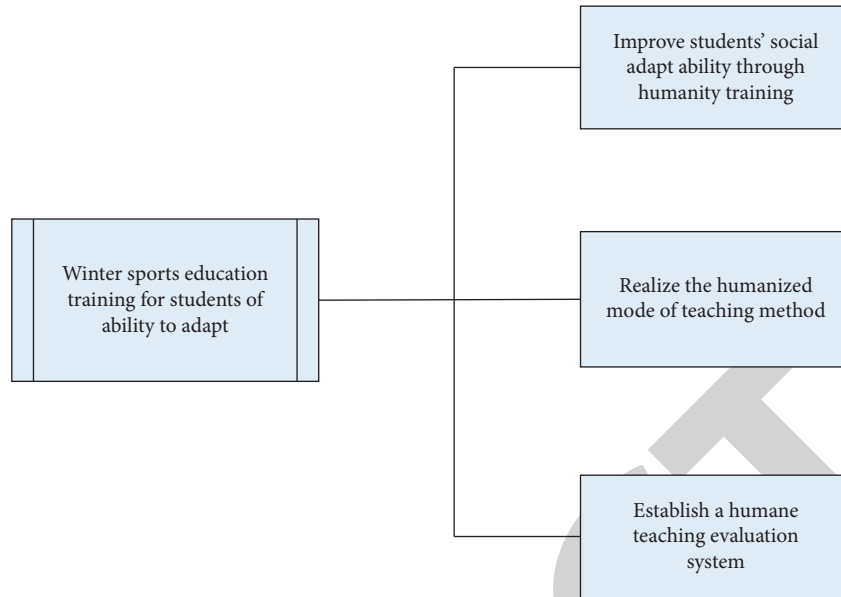


FIGURE 2: The research direction of ice-snow sports education on the cultivation of college students' adaptability.

TABLE 1: Research on the literature quantity of physical education for improving college students' social adaptability.

Years	Number of related literature studies	Growth ratio
2008	53	
2009	97	45.36
2010	98	1.32
2011	143	31.46
2012	173	17.34
2013	178	2.80
2014	217	17.97
2015	215	-0.93
2016	245	12.24
2017	235	-4.25
2018	267	11.98

physical education to improve the social adaptability of college students.

From Table 1 and Figure 3, it can be seen that the number of domestic physical education documents on improving college students' social adaptability is generally on the rise. The largest increase was in 2009, reaching 45.36%, and the highest number of documents in 2018 was 567, compared with the previous year. The increase of 11.98% shows that more and more researchers are concerned about the social adaptability of college students and hope to improve the social adaptability of college students through physical exercise.

4.2. Results of the Winter Sports Education to Enhance the Ability of Community College Students to Adapt to the Southern Analysis. It can be seen from Table 2 and Figure 4 that more women were interviewed than men, accounting for 83.9% of the total, and seniors accounted for 26.7%. According to the survey, boys' social adaptability is higher than that of girls, and the social adaptability of freshmen, sophomores, juniors, and seniors also increases with age.

Comparing different majors, arts and sports students are slightly more socially adaptable than science and engineering students, and liberal arts students are slightly lower. It shows that the overall social adaptability of college students needs to be improved.

From Figure 5 and Table 3, it is found that 88.5% of the students who have received ice and snow physical education are mainly for physical fitness; in addition, 42.7% and 35.4% are for the purpose of shaping bodybuilding and promoting mental health. The proportion is also relatively large. The proportion of improving social adaptability is not high. The proportion of boys is 25.7% and the proportion of girls is 26.9%. This shows that college students' awareness of this aspect is not high enough, and colleges and universities need to give full consideration and guidance to help college students improve. It can be seen from this that, in the eyes of most students, the main purpose of receiving ice and snow physical education is to exercise, form a good body shape and maintain a healthy mental state.

This article divides sports venues into gymnasiums, school playgrounds, parks, and ski resorts. The exercise duration is divided into three time periods: less than 30 minutes, 30–60 minutes, and more than 60 minutes. From the data in Table 4, it can be seen that the proportion of people exercising on the school playground is the highest, reaching 38%, the proportion of people in the gym is 34%, and the proportion of people in the park is 28%. Most of the people who exercise on the school playground are college students, and their awareness of exercise is relatively high, and the school playground is a very convenient place for sports. The gym is mainly a place for young people to exercise. It can make friends widely, improve communication skills, and enhance social adaptability. As a professional sport, ski resorts need professional guidance. For Southern University students, setting up ski resorts for professional ice and snow sports education and training is not only a sense of



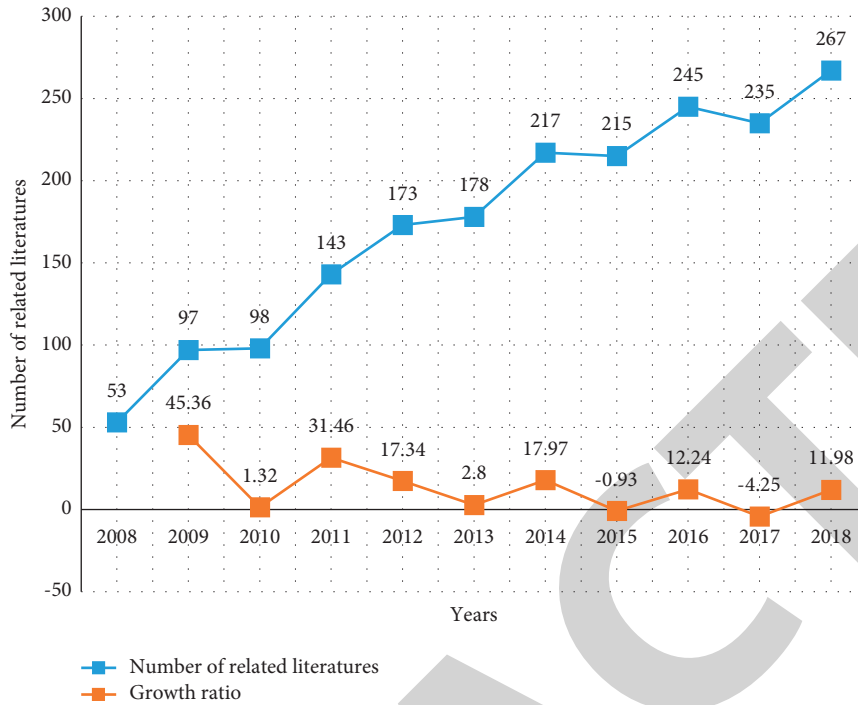


FIGURE 3: Research on the literature quantity of physical education for improving college students' social adaptability.

TABLE 2: An overall analysis of the influence of college students' participation in ice and snow sports on their social adaptability.

	Schoolboy	Girl student	Science and engineering	Sports art
Freshman	13.6	12.4	8.9	7.7
Sophomore	25.6	22.4	15.6	12.4
Junior	29.7	23.5	22.7	25.9
Senior	35.8	33.7	35.8	38.9
Population	98.7	83.9	84.9	87.3

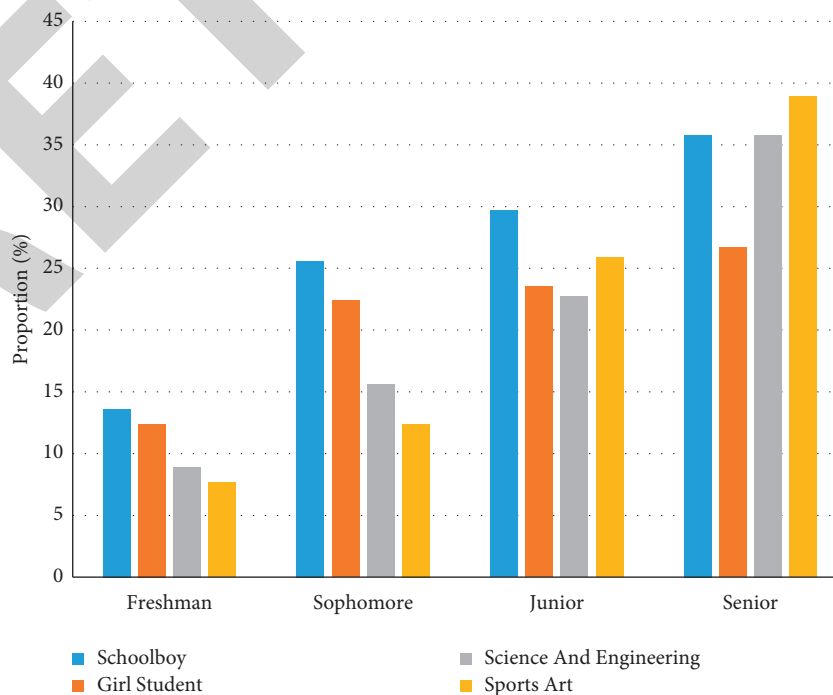


FIGURE 4: An overall analysis of the influence of college students' participation in ice and snow sports on their social adaptability.

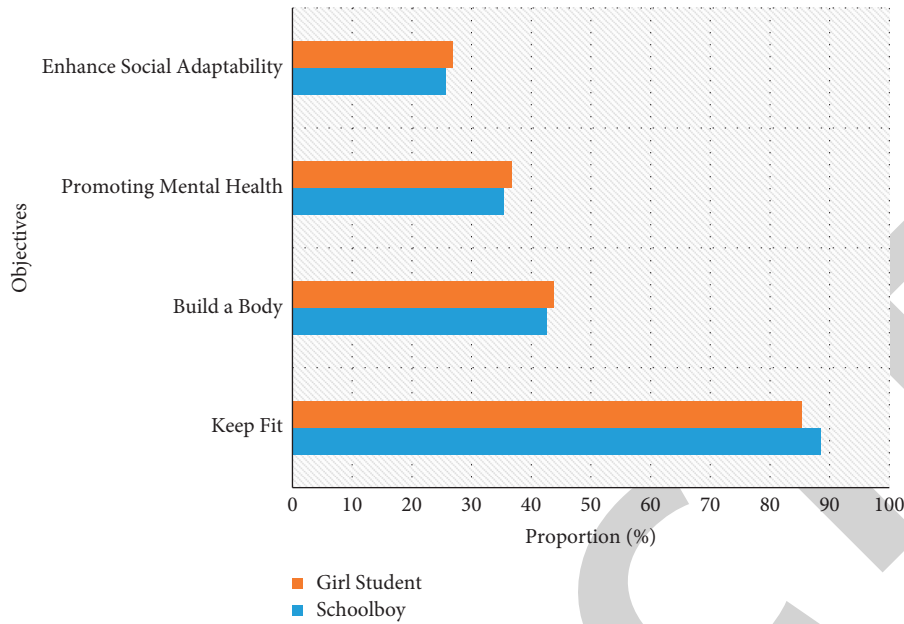


FIGURE 5: Analysis on the purpose of college students' participation in ice and snow sports education.

TABLE 3: Analysis on the purpose of college students' participation in ice and snow sports education.

Objective	Schoolboy	Girl student
Keep fit	88.5	85.3
Build a body	42.7	43.9
Promoting mental health	35.4	36.8
Enhance social adaptability	25.7	26.9

TABLE 4: The choice of sports time and sports place for college students.

Sports venues	Proportion of people (%)	Exercise duration (min)	Proportion of people (%)
Gym	34	Less than 30 minutes	15
		30-60	35
		Above 60	48
School playground	38	Less than 30 minutes	25
		30-60	46
		Above 60	12
Park	28	Less than 30 minutes	26
		30-60	33
		Above 60	13
Ski field	25	30-60	58

freshness, but also a sense of tension. 25% of students are willing to go to ski resorts to participate in ice and snow sports training. The course is set for 30-60 minutes, which can achieve the purpose of physical exercise and improve social adaptability. For Southern University students, they can better adapt to different situations. The external environment can also learn different exercise methods.

It can be seen from Figure 6 that 15% of the exercise time in the gym is less than 30 minutes, 35% of the time is 30-60 minutes, and 48% of the time is more than 60 minutes; regarding exercise in the school playground, the proportion of time less than 30 minutes is 25%, the proportion of time between 30 and 60 minutes is 46%, and the proportion of time exceeding 60 minutes is 12%; the proportion of fitness

in the park is less than 30 minutes is 26%. The ratio of 30-60 minutes is 33%, and the ratio of more than 60 minutes is 13%. It can be seen from the data that gyms have the highest proportion of exercise time longer than 60 minutes, indicating that college students prefer professional sports venues. Therefore, setting up ice and snow sports teaching in colleges and universities can also greatly enhance students' interest and make students improve their social adaptability from ice and snow sports.

It can be seen from Figure 7 and Table 5 that group sports are more popular. This group of freshmen alone accounted for 59.6% of the total number; students who chose relatively independent programs accounted for 38.9%, and the remaining students who are uncertain in the lower part

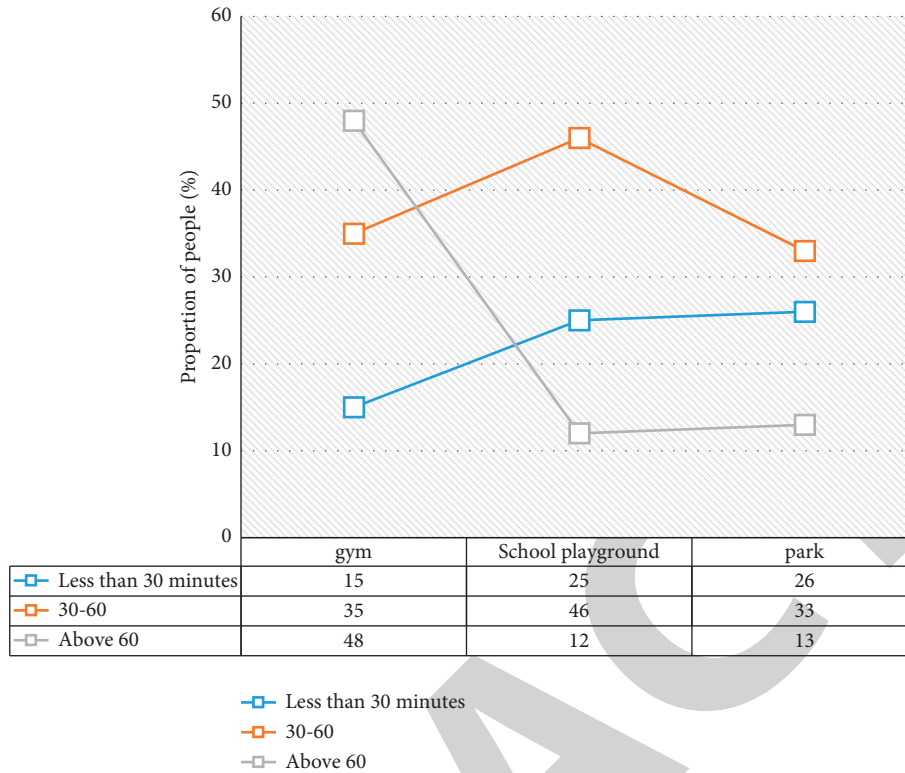


FIGURE 6: Proportion of people's exercise time in different sports venues.

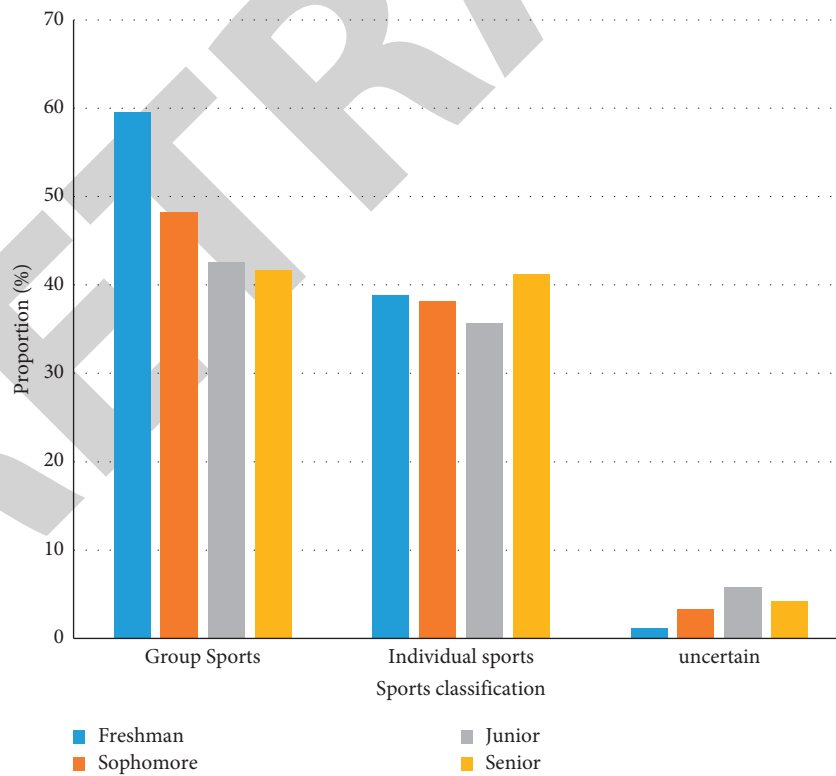


FIGURE 7: The influence of different forms of exercise on social adaptability.

account for less. Through summary analysis, it can be known that different forms of exercise can improve their own social adaptability to a certain extent, but the scores of social

adaptability are quite different. Group sports are obviously higher than independent sports, which is uncertain. Students score higher than those of independence sports.

TABLE 5: The influence of different forms of exercise on social adaptability.

Sports classification	Freshman	Sophomore	Junior	Senior
Group sports	59.6	48.3	42.6	41.7
Individual sports	38.9	38.2	35.7	41.2
Uncertain	1.2	3.3	5.8	4.2

## 5. Conclusion

This article mainly focuses on the research of ice and snow sports education on improving the social adaptability of college students in southern China. It conducts in-depth research and discussion on ice and snow sports education and the social adaptability of college students through the method of literature data, questionnaire survey, and data analysis. This paper designs an experiment of ice and snow physical education to improve the social adaptability of college students in the south, analyzes the college students' exercise methods, exercise duration, and exercise venues, comprehensively contrasts and highlights the effect of ice and snow physical exercise on improving social adaptability, and through effective exercise methods. Let college students be more calm and calm in the face of the fierce external environment and deal with it safely.

The innovation of this article lies in the following points: first, combine qualitative research with quantitative research, and fully analyze the research data; second, combine theoretical research with empirical research, and combine it on the basis of discussing physical education theory. The actual situation in ice and snow sports is empirically investigated and analyzed. Third, the innovative addition of ice and snow sports to the winter exercise courses of southern colleges and universities provides a new alternative way to improve the social adaptability of college students.

This article suggests that major colleges and universities should combine the characteristics of their own schools to develop a socialization model suitable for physical exercise of college students in major colleges and universities and strengthen the explanation of the theoretical knowledge of students' sports health and social adaptation theory, so as to make a good foundation for their future adaptation to the society.

## Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## Disclosure

The authors confirm that the content of the manuscript has not been published or submitted for publication elsewhere.

## Conflicts of Interest

The authors declare no conflicts of interest.

## Authors' Contributions

All authors saw the manuscript and approved to submit it.

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