

# A Survey on the Relationship between College Students' Basketball and Social Skills

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## Abstract

As an important reserve force for national development, college students will shoulder the core task of social construction in the future. This realistic background has prompted more and more researchers to pay attention to the fact that physical and mental activities have an important value in promoting the synergistic development of college students. This paper investigates the relationship between basketball and social skills of college students in Xi'an undergraduate colleges and universities by reviewing relevant literature and taking college students in Xi'an undergraduate colleges and universities as the research pairs. It is found that basketball can significantly improve the social competence of college students. Here we also call on college students to actively participate in basketball, hoping to develop a strong interest in basketball.

## Keywords

College Students; Basketball Activities; Social Skills

## 1. Introduction

According to UNESCO, the four learning goals of college students are: learning to be, learning to do, learning to get along with others, and learning how to learn. Among them, social skills, as a core connotation, is an important component of college life and academic growth[1]. For every college student, he/she is in an increasingly complex social field since he/she enters the campus, and social dilemma has become a prominent problem affecting his/her quality of life and physical and mental health development[2]. Modern college students are basically post-00s, and due to the influence of society, school, family and other objective environments, some college students' social difficulties are becoming more and more prominent, which leads to a series of undesirable problems.

As we all know, sports is the best way to release psychological pressure. In college life, one physical education class per week gives very few opportunities for sports, and it is impossible to ensure the necessary amount of activity[3]. This long-term

state is bound to have a negative impact on the spine, cervical spine and other bodily functions. According to the data of the National Sports Administration's sample survey on the physical activities of urban and rural residents aged 6 to 69 from March to May 2014, only 28.6% of children and adolescents participate in moderate-intensity sports outside school three times or more per week (each time lasting for more than 30 minutes); and the proportion of those who participate in high-intensity sports for one hour or more three times per week is even lower than 8.9% (National Physical Fitness Monitoring Center, 2014). Monitoring Center, 2014). Another study on college students is even more alarming - the Sixth National Research Report on Students' Physical Fitness and Health (General Administration of Sport of the People's Republic of China, 2011) shows that compared to 2005, all physical fitness indicators for students aged 19 to 22 are on a downward trend. The overall decline of college students' physical fitness and health level has become an important issue that the whole society needs to pay attention to[3] .

As the most representative sport in the current sports program - basketball, it is popular among students. On the one hand, college students can promote their physical development, improve their immunity and safeguard their health in the process of playing basketball; on the other hand, basketball, a collective program, enables college students to obtain opportunities for interaction, promotes mutual communication and exchange, and enhances their friendship, thus greatly improving their social skills. Therefore, this study will investigate the differences in social skills between students who participate in basketball and those who do not, aiming to let college students understand that participating in basketball has a positive impact on promoting mutual communication.

## 2. Literature Review

In order to systematically and deeply analyze the relationship between college students' basketball and social competence, this part will analyze previous scholars' studies to launch a review, in order to provide a theoretical basis and research reference for this study.

From the three cognitive dimensions of memory, attention and executive function, Lu Xinxin (2019) explored in depth the effect of basketball on college students' cognitive ability by conducting a long-duration basketball intervention experiment. The results of the study showed that prolonged participation in basketball not only significantly improves college students' memory encoding and information extraction abilities, but also effectively enhances their attentional breadth and sustained focus, and has a significant effect on inhibitory control ability in executive function. This study provides important empirical evidence for improving college students' cognitive functions through physical activities[4] . Xia Wenxue (2020), on the basis of exploring the mechanism of basketball sports intervention on college students' interpersonal relationship and aggression, further constructed a model of interpersonal

relationship mediating effect of basketball sports intervention on preventing college students' aggression, which provided empirical support for the development of college students' aggression sports intervention program based on the perspective of interpersonal relationship improvement. The study found that the basketball sports intervention significantly promoted college students' interpersonal communication skills; the direct inhibitory effect of the intervention on college students' aggression was significant, and the indirect pathway of preventing aggression through the improvement of interpersonal relationships was also statistically significant[5]. Wu, Wenjun, and Xiang, Xiaoping (2020) used a questionnaire to examine the effects of peer interactions on positive and negative mental health of college students and found that the frequency of peer interactions and interpersonal competence of college students had a greater correlation with positive mental health (e.g., positive emotions, self-esteem) and a smaller correlation with negative mental health (e.g., academic stress, negative emotions)[6].

Liu Yan and Qu Kejia (2017) investigated and analyzed the current situation of college students' participation in sports and its relationship with interpersonal adaptation, and used questionnaires, mathematical statistics and other research methods to show that college students' participation in sports has a significant impact on interpersonal adaptive capacity: college students who participate in sports have a significantly higher level of interpersonal adaptive capacity than those who don't; college students who participate in group sports have significantly higher interpersonal adaptive capacity than those who don't; college students who participate in team sports have a significantly higher level of interpersonal adaptive capacity than those who don't. The interpersonal adaptive ability of college students who participate in group sports is significantly higher than that of college students who participate in solo sports; the more often and the more time they participate in sports, the stronger their interpersonal adaptive ability is. Guidance for college students' sports participation can improve the social adaptability of college students' interpersonal relationships[7].

Existing studies have shown that sports activities have multidimensional effects on college students' cognitive and social adaptive abilities. These studies provide theoretical and empirical support for sports to promote the physical and mental development of college students.

### **3. Research Design**

#### **3.1 Research Objects**

It is not difficult to find that among sports activities, basketball activities have become the primary choice of many college students. Both freshmen and seniors have a love for basketball activities. Therefore, this study takes the students of Xi'an undergraduate colleges and universities as the research object and distributes questionnaires for investigation.

### 3.2 Design of the questionnaire

The production of the questionnaire in this study includes: the preparation stage, the design stage and the revision stage, and the main steps include:

The first is to clarify the theme of the questionnaire, the questionnaire on the relationship between college students' basketball and social skills, and to determine the references needed for the questionnaire through a lot of searching and reading a lot of relevant references.

The second is to determine the target of the survey and conduct an in-depth and targeted analysis of the target of the survey, to understand the relationship between basketball and social skills by comparing the differences in social skills between college students who participate in basketball and those who do not participate in basketball.

Third, the questionnaire was set up, first, to understand the basic characteristics of the respondents, including gender, age, specialty and type of domicile. Second, a social competence scale for college students was designed. The scale consists of 12 questions, which are organized on a five-point Likert self-assessment scale, with 1~5 points from "not at all" to "very much", and in order to improve the reliability of the scale, questions 7, 9, and 10 are scored by reverse scoring, and the mean and variance are compared for each question. In order to increase the reliability of the scale, questions 7, 9, and 10 were reverse scored, and by comparing the mean and variance of each question, higher scores indicate higher social skills. Finally, when designing the questions, attention is paid to the coherence of the language and the relevance of the questions before and after, in order to conform to the ideological and psychological needs of the respondents, and to set up the questions in such a way that they do not burden the respondents physiologically and psychologically. The design of the questionnaire survey should be closely related to the issues to be explored, and combined with the subject of the survey, so that the questions are more targeted.

Fourth, determine the content of the questionnaire, and make timely amendments to it according to the instructor's analysis of the questionnaire.

Fifth, to do a good job of questionnaire design and distribution, this questionnaire will be used in the electronic version of the questionnaire distribution and recovery, paper version of the questionnaire distribution and recovery of two forms.

### 3.3 Questionnaire distribution and recovery

This questionnaire selects college students of undergraduate colleges and universities in Xi'an and distributes the questionnaire to them. A total of 110 questionnaires were returned, of which 104 were valid, and the validity rate of the questionnaire was 94.55%.

#### 3.3.1 Composition of the questionnaire

The basic statistics of the survey respondents are shown in Table 1. In terms of gender, there are 75 male respondents, accounting for 72.1%, and 29 female respondents, accounting for 27.9%; in terms of grade, the third year of the university has the largest proportion, with a percentage of 39.4%; in terms of the type of major, the category of economics and management has the largest proportion, with a percentage of 51.9%, and the other types have the smallest proportion, with a percentage of 8.7%; In terms of the type of household registration, urban population accounts for 46.2% and non-urban population accounts for 53.8%.

**Table 1.** Basic Information of Individuals

| Name                        | Option                   | Number of persons | Percentage (%) |
|-----------------------------|--------------------------|-------------------|----------------|
| Sex                         | Male                     | 75                | 72.1           |
|                             | Female                   | 29                | 27.9           |
| Year                        | Freshman year            | 25                | 24.0           |
|                             | Sophomore                | 21                | 20.2           |
|                             | Junior                   | 41                | 39.4           |
|                             | Senior                   | 17                | 16.4           |
|                             | Science and Engineering  | 23                | 22.1           |
| Major Type                  | Economics and Management | 54                | 51.9           |
|                             | Literature and History   | 18                | 17.3           |
|                             | Others                   | 9                 | 8.7            |
| Household registration type | Urban                    | 48                | 46.2           |
|                             | Non-urban                | 56                | 53.8           |

## 4. Research results and analysis

### 4.1 Basic status of college students' participation in basketball activities and college students' social skills

#### 4.1.1 Descriptive statistics of the basic status of college students' basketball activities

1. Statistics on college students' willingness to participate in basketball activities  
College students' willingness to participate in basketball activities is one of the indicators to analyze the degree of college students' participation in basketball activities, which can accurately understand whether college students are willing to participate in basketball activities. Table 2 shows that the number of college students who never participate in basketball is 34, while the number of college students who have participated in basketball is 66. This shows that there are most people in the college student group who have participated in basketball.

**Table 2.** Comparison of college students' participation in basketball sports

| Name                                                | Option       | Number of people | Percentage (%) |
|-----------------------------------------------------|--------------|------------------|----------------|
| Whether to participate in basketball during college | Never        | 34               | 32.7           |
|                                                     | Occasionally | 39               | 37.5           |
|                                                     | Often        | 31               | 29.8           |

2. Statistics on the number of times college students participate in basketball activities

ties per week

The number of times college students participate in basketball activities can reflect the attitude and positive degree of college students' participation in basketball activities, which has certain reference value for measuring the degree of college students' participation in basketball activities. As shown in Table 3, the largest proportion of the number of times college students participate in basketball activities is 1-3 times per week, which is as high as 41.3%; the number of college students who participate in basketball activities 1-3 times per week accounts for 35.6% of the number of surveyed people; and the lowest proportion is the number of college students who participate in basketball activities more than 3 times per week, which accounts for only 23.1%. It can be seen that the current number of college students' basketball participation is relatively low, and their enthusiasm for basketball is weak.

**Table 3.** Comparison of the number of times college students participate in basketball activities per week

| Name                                                                           | Option                   | Number of people | Percentage (%) |
|--------------------------------------------------------------------------------|--------------------------|------------------|----------------|
| Number of times per week college students participate in basketball activities | Never                    | 37               | 35.6           |
|                                                                                | 1-3 times a week         | 43               | 41.3           |
|                                                                                | More than 3 times a week | 24               | 23.1           |

### 3. Statistics on the average duration of college students' participation in basketball activities

College students' participation in basketball time is one of the indicators to measure the degree of college students' participation in basketball activities, which can reflect the length of time that individuals participate in basketball activities in their daily lives. As can be seen from Table 4, the largest proportion of college students' participation in basketball is 0-30 minutes, accounting for 38.5%; those who participated in basketball for 31-60 minutes and 61-120 minutes accounted for 20.2% and 26.0% of the total number of investigators, respectively; and those who worked out for more than 121 minutes were the least, accounting for 15.4%. It can be seen that the time for college students to participate in basketball is also relatively small. This may be due to the fact that basketball is physically demanding, and some students feel physically weak after half an hour of exercise. Therefore, it is more important for college students to participate in basketball to enhance their endurance.

**Table 4.** Comparison of the duration of college students' participation in basketball sports

| Name                                             | Option              | Number of people | Percentage (%) |
|--------------------------------------------------|---------------------|------------------|----------------|
| Average duration of playing basketball each time | 0-30 minutes        | 40               | 38.5           |
|                                                  | 31-60 minutes       | 21               | 20.2           |
|                                                  | 61-120 minutes      | 27               | 26.0           |
|                                                  | 121 minutes or more | 16               | 15.4           |

### 4.1.2 Descriptive statistics of college students' social skills

#### 1. Overall description of college students' social competence

As can be seen from Table 5, the social competence of college students is in the up-

per middle level (mean score 39.1), indicating that the social competence of college students at present is at a relatively good level.

**Table 5.** Descriptive Statistics of Social Skills of College Students

|                              | Min  | Max  | Mean Score |
|------------------------------|------|------|------------|
| Total score of social skills | 23.0 | 50.0 | 39.1       |

## 2. Comparison of Interpersonal Relationship Distress among College Students

From Table 6, it is easy to find that the number of college students who like basketball with no or only a little interpersonal relationship distress is significantly higher than that of those who don't like basketball. This difference may be due to the fact that basketball itself is also an interactive sport, and the players on the court can only get more accurate information by communicating with each other to win the game; even if the game is lost, the players can point out each other's deficiencies and correct them by training to improve their own ability[8]. In the long run, in this kind of interaction indirectly improves the interaction ability of college students, so that they are no longer afraid of interacting with other people[9].

**Table 6.** Occurrence of Interpersonal Distress in College Students Who Like Basketball and Those Who Do Not Like Basketball

|         | No | A little | Yes | Percentage (%) |
|---------|----|----------|-----|----------------|
| Like    | 33 | 31       | 3   | 64.4%          |
| Dislike | 6  | 15       | 16  | 35.6%          |

## 4.2 Relationship between college students' basketball and social competence Present Situation Analysis

By analyzing and comparing whether college students like basketball with college students' social competence and its various dimensions using one-way ANOVA, the internal connection between basketball and social competence can be explored from it, revealing certain trends and characteristics of changes between the two, and providing data support for the in-depth exploration and validation of the relationship between the two.

Through the analysis of the 12 social competence items (see Tables 7), in terms of their score averages, the college students who dislike basketball are all lower than those who like basketball, which indicates that compared with the college students who dislike basketball, the college students who like basketball are more inclined to communicate with others and have better social competence, which is also consistent with the results in Table 6. This result may be related to the nature and characteristics of basketball. From the viewpoint of college students' basketball course, basketball training course is an important part of college students' study and life, and its course environment has certain special characteristics, which is mainly manifested in the outdoor, openness and activity, which undoubtedly enhances college students' social skills, and it is a special environment in which they not only learn and improve their professional skills in basketball, but also promote the

communication and exchange between people. From the point of view of the characteristics of basketball, the collective characteristics of basketball are obvious, and thus the synergistic and open characteristics are obvious, which is extremely favorable to the cultivation of social skills and teamwork spirit of college students[10], which is difficult to be cultivated in the college students who don't like basketball in this aspect.

**Table 7.** Comparison of the mean of social competence items of college students who like basketball and those who dislike it

| Item                                                                                                                                                                                              | Like             | Dislike          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|
| 1. usually feel free regardless of participating in any social activities.                                                                                                                        | $3.82 \pm 0.984$ | $2.51 \pm 1.017$ |
| 2. usually feels relaxed when playing sports with unfamiliar people.                                                                                                                              | $3.7 \pm 1.000$  | $2.65 \pm 1.111$ |
| 3. can take the initiative to invite unfamiliar people to do something with you, e.g., inviting someone to play sports with you.                                                                  | $3.7 \pm 0.954$  | $2.3 \pm 0.968$  |
| 4. willing to do things together or make suggestions for those who are interesting and attractive to you.                                                                                         | $3.9 \pm 0.781$  | $2.78 \pm 0.787$ |
| 5. avoided talking with classmates about topics that could cause disagreements or arguments.                                                                                                      | $3.84 \pm 0.881$ | $3.08 \pm 1.064$ |
| 6. take the initiative to introduce yourself to people you want to get acquainted with.                                                                                                           | $3.67 \pm 0.860$ | $2.92 \pm 1.038$ |
| 7. usually feel anxious and nervous when there is a person of the opposite sex attending the event.                                                                                               | $2.82 \pm 0.920$ | $3.34 \pm 1.09$  |
| 8. can establish new interpersonal relationships with strangers when attending a friend's party.                                                                                                  | $3.33 \pm 0.860$ | $3.05 \pm 1.026$ |
| 9. I am particularly nervous about speaking when leaders and teachers are present.                                                                                                                | $2.91 \pm 0.917$ | $3.59 \pm 1.103$ |
| 10. With a large group of friends, I often feel lonely or lost.                                                                                                                                   | $2.09 \pm 1.083$ | $3.22 \pm 0.976$ |
| 11. know how to move forward in a conversation with a friend or acquaintance of the opposite sex so that the conversation goes beyond generalizations and actually promotes mutual understanding. | $3.52 \pm 0.943$ | $2.95 \pm 1.104$ |
| 12. You are able to provide good advice to your friend when he or she needs help or support.                                                                                                      | $3.85 \pm 0.783$ | $3.00 \pm 1.130$ |

## 5. Conclusion and Response Suggestions

### 5.1 Main conclusions

There is a significant difference between the social ability of college students who like basketball and those who don't. The difference in social ability is mainly manifested in three aspects: from the aspect of personality, college students who like basketball sports are more open in their personality; from the aspect of interpersonal relationship distress, college students who like basketball sports have less interpersonal relationship distress; from the aspect of interaction ability, college students who like basketball sports are able to deal with relationships with others well. To sum up, participation in basketball can improve the socialization ability of college students.

### 5.2 Suggestions for countermeasures

(1) School sports activities cover the core elements of sports facilities utilization, competitive sports practice, sports curriculum teaching and sportsmanship cultivation, which help college



students form regular exercise habits, and significantly promote the healthy development of their personality shaping and interpersonal interactions[11]. On the one hand, colleges and universities need to strengthen the infrastructure construction of sports venues, stadiums and equipment to fully meet the needs of college students' sports activities; on the other hand, they should focus on building a campus basketball cultural ecology, optimizing the basketball curriculum system, innovating the organization of basketball games and other measures to guide college students to form a scientific knowledge of basketball, and then enhance their self-consciousness to participate in basketball, helping to develop regular exercise habits. Sports Habits.

(2) Basketball has clear requirements for the trust and cooperation among team members, and participants can cultivate the sense of teamwork through sports practice, gradually overcome the sense of loneliness and social fear, and then improve the state of interpersonal communication. Therefore, it is recommended to actively learn and use interpersonal interaction strategies in basketball activities, enhance mutual understanding and trust through strengthening communication, and realize healthy growth in a united, loving and positive interpersonal environment by deepening consensus and cultivating friendship.

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