Investigation and Analysis of Current Situation of High School Campus Basketball in Huining City Based on Big Data Analysis

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Abstract. This paper adopts methods of questionnaire, literature and interview, etc. It investigates and analyzes the current situation of campus basketball development in Huining senior middle schools from the aspects of students' motivation, main forms, courses, etc. The results show that the main problems of campus basketball in these schools are as follows, including out-dated basketball teaching content, weak teaching staff, lack of sports court facilities, and insufficient attention of government departments. Thus, it is suggested to strengthen the construction of teaching staff, increase the attention of government departments to campus basketball, and strengthen the construction of basketball court facilities. In this way, we will make the campus basketball of Huining senior middle schools develop better.

Keywords: Big Data, Senior middle schools, Campus basketball, Current situation investigation

1 Introduction
Basketball is a popular sport among students and has a high value of education and exercise, which integrates collectivity, entertainment, antagonism and game. Its own characteristics, rules, and effects make it full of vitality, and has a good promotion effect on students' overall physical and mental development[1]. Middle school is a key moment for students' physical and mental development. Basketball plays an important role in enhancing students' sense of competition, improving their sports personality and training their lifelong sports consciousness[2]. This paper makes an investigation and analysis on the current situation of the campus basketball in Huining senior middle schools. This research is not only to verify the implementation of campus basketball in Huining County, but also to objectively analyze the problems in the development of campus basketball in Huining. It will provide empirical data for the better development of campus basketball in these schools.
2 Analysis on the Current Situation of Campus Basketball Development in Huining Senior Middle Schools

2.1 Investigation and Analysis on the Students' Motivation to Participate in Basketball in Huining Senior Middle Schools

Table 1 Questionnaire on Students' Motivation to Participate in Basketball in Huining Senior Middle Schools (N=290)

| Motivations                        | Number | Percentage(%) |
|-----------------------------------|--------|---------------|
| Skill improvement                 | 30     | 10.3          |
| Leisure and entertainment         | 75     | 25.9          |
| Physical Exercise                 | 34     | 11.7          |
| Communicative enhancement         | 67     | 23.1          |
| Stress relief                     | 84     | 29.0          |

As can be seen from Table 1, the motivations of students in basketball in Huining senior middle schools are different. Among them, leisure and entertainment, communicative enhancement and stress relief account for a large proportion, which shows that most students participate in basketball mainly for enriching extracurricular activities, making friends and relieving learning stress; Another part of the students is to improve their basketball skills, indicating that they start from their own preferences and needs and do not consider it as a task; Very few students are to exercise, which shows that the awareness of improving physical health of students is relatively weak. Thus, schools and parents should actively guide students to participate in physical exercises and enhance their physique.

2.2 Investigation and Analysis on the Main Forms of Students' Participation in Basketball in Huining Senior Middle Schools

Table 2 Questionnaire on the Main Forms of Students' Participation in Basketball in Huining Senior Middle Schools (N=290)

| Participation forms                  | Number | Percentage(%) |
|--------------------------------------|--------|---------------|
| With friends                         | 133    | 45.9          |
| Participation in a class basketball match | 68    | 23.4          |
| Participation in the school basketball team | 34    | 11.7          |
| Practice alone                       | 55     | 19.0          |

It can be seen from Table 2 that the forms of students' participation in basketball are different. Most students prefer to play basketball with friends. This form is random and extensive, and can also arouse students' interest in participating in basketball; Participants in the class basketball match accounts for 23.4%. This form has certain collectivity and honor and can use their winning psychology to arouse interest in basketball[3]; There are fewer students to participate in the school basketball team. The main reason is that this form requires students to have better basketball skills and physical quality, but most students can not meet the requirements; There are also a few students who practice and enjoy themselves.
2.3 Analysis on the Basketball Courses in Huining Senior Middle Schools

Table 3 Survey of Current Situation of Basketball Courses in Huining Senior Middle Schools

Term/Class hour N=30

| Schools            | One semester physical education | Basketball class hour | Percentage | Teaching material       |
|--------------------|---------------------------------|-----------------------|------------|-------------------------|
| Huining No.1 Middle School | 36                              | 18                    | 50%        | Yes (not used)           |
| Huining No.2 Middle School  | 36                              | 12                    | 33.3%      | Yes (not used)           |
| Huining No.3 Middle School  | 36                              | 10                    | 27.7%      | Yes (not used)           |

It can be seen from Table 3 that among the three senior middle schools surveyed, basketball courses in Huining No. 1 Middle School are relatively high, while those in the other two schools are relatively low. Besides, each school did not teach according to basketball teaching materials, and the teaching content was arbitrarily formulated by the physical education teachers in each school. This teaching mode is useless to students' understanding and participation, hinders the popularization and development of basketball in these schools, and makes basketball in schools backward. Teachers should teach according to the syllabus. Through teaching materials, students will learn about the development, techniques, rules of basketball, etc., and learn more about basketball and love basketball.

2.4 Investigation and Analysis on the Current Situation of Campus Basketball Training and Competition for Senior Middle School Students in Huining

Table 4 Survey on the Current Situation of Campus Basketball Training and Competition for Senior Middle School Students in Huining (N=30)

| Schools            | Training times per week | Time of each training | Number of school competitions per year | County leagues per year |
|--------------------|-------------------------|-----------------------|---------------------------------------|-------------------------|
| Huining No.1 Middle School | 2                    | 60 mins               | 2                                     | 2                       |
| Huining No.2 Middle School  | 2                    | 60 mins               | 1                                     | 2                       |
| Huining No.3 Middle School  | 2                    | 80 mins               | 3                                     | 2                       |

It can be seen from Table 4 that students of these schools have basketball training twice a week, and most of the training time is 60 minutes. Among them, Huining No. 3 Middle School is rather prominent with 80 minutes, and there are 1-3 competitions in each academic year, while the county holds 2 competitions each year. Thus, schools and education departments do not pay enough attention to basketball training and competitions. Thus, education departments should focus more on middle school basketball, improve its quality, and ensure the number and time of training. It is necessary to hold more basketball leagues, establish campus basketball teams, conduct systematic training, improve its atmosphere, and make students have a strong interest in basketball[4].
3 Analysis on Influencing Factors of Campus Basketball Development in Huining Senior Middle Schools

3.1 Influence of Basketball Court Facilities on the Campus Basketball Development in Huining Senior Middle Schools

From the investigation, there are 10 basketball courts in Huining No.1 Middle School, including 3 plastic courts, no indoor basketball courts, and 100 basketballs in total; There are 10 basketball courts in Huining No.2 Middle School, including 3 plastic courts, no indoor basketball courts, and 100 basketball courts; There are 10 basketball courts in Huining No.3 Middle School, including no plastic courts or indoor basketball courts and 60 basketballs. It can be seen that there are quite many basketball court facilities in these schools, but not standard enough, and most of them are cement. None of the three schools has indoor basketball courts. This requires relevant departments to focus on and enhance the construction of stadium facilities to meet the daily basketball needs of students.

3.2 Influence of Basketball Teachers' Education Background on Campus Basketball Development in Huining Senior Middle Schools

Through the spot check of the education background of basketball teachers in these schools, it can be seen that 18 have junior college degree or below, accounting for 60% among the 30; There are 10 undergraduates, accounting for 32.9%; There are 2 postgraduates or above, accounting for 7.1%. Thus, the education background of basketball teachers in these schools is mainly junior college or below. As a whole, basketball teachers' education background is low, and causes the disadvantage of campus basketball. In the later teaching, schools should guide teachers to strengthen their learning, and for teachers with college degrees and below to improve their academic qualifications and enhance teaching ability through advanced studies and other methods[6].

3.3 Influence of the Age Distribution of Basketball Teachers on Basketball Development in Huining Senior Middle Schools

Through spot check on the age of basketball teachers in these schools, among 30, only 4 are 20-29 years old, accounting for 13.3%; 7 aged 30-39, accounting for 22.3%; 12 aged 40-49, accounting for 40.1%; 7 aged over 50 years old, accounting for 22.3%. It can be seen that the proportion of middle-aged and elderly basketball teachers in these schools is high, and the number of young teachers is small. Generally speaking, young teachers have strong learning ability, more advanced thoughts, and small gap with students and can integrate into students more quickly, thereby enhancing their communication. Thus, schools should increase the introduction of young teachers.

3.4 Influence of the Supporting Level of the Huining Government Departments on Basketball Development

Through the spot check of the support of the government departments of Huining for basketball in senior middle schools, 16 out of 80 are very supportive, accounting for 20%; 50 people do not support, accounting for 62.5%; 14 people generally support, accounting for 17.5%. It can be seen that the government departments are not enough to support the campus basketball in Huining senior middle schools. As a result, campus basketball has been in a passive state, which has affected its effective development and failed to train excellent basketball players. The government should increase investment, emphasize in ideology, and give strong support in action[6], so that the campus basketball in Huining senior middle schools can be better developed.
4 Analysis on the Countermeasures of Campus Basketball in Huining Senior Middle Schools

4.1 Strengthening the Construction of Basketball Court Facilities in Huining Senior Middle Schools
Basketball court facilities are necessary condition for the basketball. The improvement of the basketball courts and facilities in schools is the basic condition to ensure its teaching, and also an important factor to ensure the sports quality[7]. These facilities of the three schools in Huining investigated can only satisfy students in class, but not the extracurricular activities. The lack of basketball courts has seriously affected students' enthusiasm. Thus, it is necessary to strengthen the construction of basketball court facilities.

4.2 Strengthening the Construction of Basketball Teachers in Huining Senior Middle Schools
Sports teachers are important in physical education. Schools should strengthen the construction of teachers, improve their professional level, organize them to observe and study in areas or schools where basketball is well developed, and learn from advanced teaching experience; Teachers should use multimedia and 2K games to stimulate students' interest, explore effective ways to enhance students' participation[8], and promote the effective development of campus basketball in Huining senior middle schools.

4.3 Increasing Funds for Campus Basketball in Huining Senior Middle Schools and Organizing More Basketball Matches
The Huining government should implement the policies and documents issued by the Party Central Committee and the State Council for the campus basketball. It should increase the emphasis on campus basketball, allocate special funds to support schools, and promote it with sufficient funds. Schools should make reasonable use of funds to organize and coordinate the campus basketball matches. All senior middle schools and government can jointly set up a basketball aid fund to improve the system and fully motivate their enthusiasm and participation[9].

5 Conclusion
The development of campus basketball in Huining senior middle schools is not optimistic, with out-dated teaching content and lack of innovation; The number of basketball courts is small, teachers are weak, lack of professional basketball teachers with high level; The fewer times of training and competition cause the less interest of students in basketball, which hinders its development[10]. Thus, it is necessary to make an improved development plan, and innovate the teaching content to make more students love basketball; It should increase the investment in basketball facilities to better meet the sports needs of students; It should strengthen the construction of the teachers specialized in basketball, introduce the high academic sports talents and improve the teaching ability; The government should vigorously support the development of basketball, promote the vigorous development of sports, and promote the development of campus basketball in Huining senior middle schools quickly and effectively.

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