On the Application of Computer Software in the Technical Statistics of Basketball Match

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Abstract. Many people like to watch basketball games. Basketball games can make people blood boil. In the process of judging basketball players, the statistical method of basketball technique is an effective way to evaluate players' tactical and technical ability. Through this kind of statistical technology, we can count a player's various game skills and the rules he violates. These include shooting, rebounding, mistakes, fouls and playing time. If the technical statistics of basketball match is carried out manually, it is not ideal. After a long-term research, the technical staff of the Basketball Association put forward the method of basketball technical statistics of computer software. This paper analyzes and discusses the application of basketball technology statistics based on computer technology, and finally comes to a conclusion.

Keywords: Computer, Basketball Game, Technical Statistics

1. Introduction

People who have played basketball know that in the process of basketball game, each player's specific task is different. Because of the difference between the demands of attack and defense and the physical quality of the players, the basketball coach will divide the positions of the players of the team into details[1]. Therefore, when coaches evaluate basketball players, they need to consider their specific position and division of labor. On this basis, the appropriate technical statistics can help coaches to know more about the advantages and disadvantages of athletes.

In order to meet the requirements of the technical evaluation of basketball, people used to use the artificial way to evaluate the technical evaluation of the players in the previous basketball games. However, this way of working is very laborious and prone to many mistakes. Therefore, people put forward the application of basketball game technology statistics based on computer software.

2. Analysis of the main research methods and objects
This research mainly uses the method of combination of programming and practical operation to analyze the computer software which can carry out basketball technical statistics properly. According to the theory of software programming, we will use the repeated steps of programming, practical operation, and improvement to complete this research topic.

The main object of this study is the statistical process of basketball game. In order to ensure the accuracy of the competition data, we plan to use the National Men's basketball championship competition data for corresponding statistics and analysis.

3. Determination of computer hardware facilities

In order to achieve the main purpose of this study, we carefully look for the relevant information in the network. According to the introduction of the paper by experts from the Chinese Academy of Sciences, we plan to use the small computer zz-501 to complete the technical statistics of basketball. According to the instructions, we can make sure that the computer can store data of dozens of games. Moreover, it will be difficult to carry and power failure accidents\(^2\).

In fact, in the process of ordinary basketball games, the statistical speed of small computers can be recognized by experts. The utility model has the advantages of small volume, light weight, excellent performance and simple operation method. Therefore, we do not need to worry that the user will not operate the device.

4. The development and use of the application software based on the computer technology in the technical statistics of basketball match

After obtaining the main external facilities, we should start to prepare the internal procedure development of the equipment\(^3\). In fact, every external device has a corresponding software. According to the instructions of the software, we determined the steps of using the software. They include the determination of indicators, the preparation of procedures and written instructions.

4.1. Key points of perfecting technical indexes

In the face of a large number of basketball game data, we first need to improve the content of technical indicators as soon as possible. The object of this experiment is the basketball match of Beijing Asian Games. According to the trend and speed of basketball progress, the statistical content of this game will be representative. According to our repeated calculation and modification, we have formulated a unified table (see Table 1).

| Table 1. List of experiment process |
|-----------------------------------|
| Step                          | Subjects                      | Experimental effect            |
| The first experiment           | Asian games                   | Only procedure                 |
| The second experiment          | Men's Basketball Championship | Procedures and instructions    |
| The third experiment           | Men's basketball group match  | Procedures and AIDS           |

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4.2. The programming of technical statistics in basketball match

In order to carry out the technical statistics of basketball games in an all-round way, we are going to adopt the procedure of technical statistics of basketball games in the representative Asian Games. After obtaining this program, we need to add two necessary procedures. The first paragraph is a modified and abandoned procedure, which is used to correct errors and ensure the accuracy of statistical data[3]. The second section is the check procedure, which is used to check the information of the players in time.

4.3. The perfection of the material of the text description

In the process of technical statistics of basketball games, there are many kinds of problems. One of the most complicated problems is that the scale of technical statistics of players with different positions is the same. This will lead to the technical statistics is not strict and accurate. Therefore, before the technical statistics of basketball games, we need to provide different technical statistics standards and systems for the players in different positions. This way can increase the accuracy of basketball game statistics[4].

5. Networking and communication relationship between minicomputers and computers

It's not convenient to carry ordinary computers. Therefore, in order to ensure the work efficiency of the statisticians, we use a small computer to conduct technical statistics on the court. However, the data storage capacity of small computers is limited. Its capacity is much smaller than that of ordinary computers[5].

Therefore, we can connect small computers with ordinary computers. Through the relationship between networking and communication, the data of small computers are transferred to computers. At present, there are two ways of communication between minicomputers and computers. One is to realize communication through serial port connection. The other is to communicate through online communication software. In the face of different competition conditions, technicians can use different communication methods according to the actual situation[6].

6. Conclusion

In fact, the use of small computers for technical statistics of ball games is proposed in recent years. Obviously, this kind of computer is easy to operate, can correct mistakes and is easy to carry. It can also communicate with computers on the Internet. There is no doubt that it has a strong use value.

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