

Analysis of Chat GPT System Handling International Sports Intellectual Property Disputes

Lin Zhu *

School of Physical Education, Leshan Normal University, Leshan, Co 614000, China

* Corresponding author Email: 444289903@qq.com

Abstract: The Chat GPT artificial intelligence system is an extremely powerful information processing tool that can provide rich professional knowledge for scientific research. The aim of this study is to explore the theoretical basis, legal basis, governance concepts, jurisdiction methods, law enforcement measures, and other aspects of international sports intellectual property disputes through the Chat GPT system, in order to identify the shortcomings in the process of resolving international sports intellectual property disputes, and then propose the best solution for resolving international sports intellectual property disputes, To safeguard the relevant rights and interests of international sports intellectual property rights holders and promote the healthy development of international sports industry.

Keywords: Sports; Intellectual Property Right; Artificial Intelligence; International Law; Copyright.

1. Introduction

The internationalization of sports intellectual property rights has led to the internationalization of sports intellectual property disputes, and the application of digital technology has exacerbated international disputes over sports intellectual property rights. To ensure the healthy development of sports worldwide, it is necessary to safeguard international intellectual property rights in sports. Based on this, global management institutions for sports intellectual property have emerged, such as the International Court of Arbitration for Sports, the Canadian Sports and Law Center, the Belgian Sports Arbitration Commission, the Japanese Sports Arbitration Agency [1], the World Intellectual Property Organization, and the World Trade Organization [2]. What is the performance of such organizations in resolving international sports intellectual property disputes? What are the advantages? What are the shortcomings? Clarifying these issues is the key to resolving international sports intellectual property disputes.

As is well known, the artificial intelligence Chat GPT system has powerful information processing functions and has been applied to various fields such as sports competition [3], sports fitness [4], supervision and management [5]. This study aims to resolve international sports intellectual property disputes. We plan to collect information through the Chat GPT system, use multiple rounds of Q&A to explore the shortcomings of relevant institutions in the handling of international sports intellectual property disputes, explore the underlying reasons for the problems, and seek corresponding response measures. The research questions are divided into three levels: simple, average, and difficult, with 20 questions in each group, totaling 60 questions. Ask questions to the Chat GPT intelligent system one by one in order of ease to difficulty, and score multiple rounds based on the quality of the system's answers to questions, its score from low to high is 0,1,2 points. On the basis of multiple rounds of scoring, determine the answers to the problems that need to be solved when handling international sports intellectual property disputes, in order to optimize the international sports intellectual property dispute resolution mechanism and

promote the healthy development of world sports.

2. Analysis of Chat GPT System Processing Results

2.1. Analysis of Answers to Simple Questions

Table 1. Answers to Simple Questions

Answer	Wrong	Half wrong	Correct
Score	0	1	2
Frequency	3	3	14

In international sports intellectual property disputes, the first type of issue is relatively simple, mainly involving the basic concepts, theoretical connotations, expressive characteristics, and simple logical relationships with international sports intellectual property. From the results of the Chat GPT system answering questions, it mainly manifests as fast answer speed, abundant output content, and high probability of accuracy. In short, the system is highly efficient in solving general theoretical problems of international sports intellectual property rights, and the results are relatively ideal. Among the 20 simple questions set in this study, 14 questions scored 2 points, 3 questions scored 0 points, and 3 questions scored 1 point. In the 2-point question, Chat GPT accurately answered what sports intellectual property is, what are the rights subjects, what are the rights content, what are common disputes, and more appropriately explained its differences and connections with international sports intellectual property. The system states: Sports intellectual property rights refer to various intellectual property rights in the field of sports, while international sports intellectual property rights emphasize the problems and impacts, they generate on an international scale. In a broad sense, international sports intellectual property rights can be understood as all sports intellectual property rights issues that arise in cross-border situations. In a narrow sense, international sports intellectual property rights generally refer to sports intellectual property rights issues that involve multiple countries or regions, such as cross-border sponsorship contract disputes, cross-border trademark

infringement disputes, etc. There are three questions for scoring 1 point: (1) What are the main characteristics of sports intellectual property disputes? (2) If the copyright of sports events is recognized internationally, what is its innovation point? (3) What are the ways to protect intellectual property rights in sports technology? Firstly, the system believes that the characteristics of sports intellectual property rights include diversity, legality, high social attention, multi-party participation, and high difficulty in solving problems. Admittedly, the above are some characteristics of sports intellectual property disputes, but the author believes that the essence of sports intellectual property disputes lies in their sportiness. Only the characteristics exhibited by sports intellectual property of that based sports can be called basic characteristics, while others are no different from traditional intellectual property. Secondly, in terms of sports event copyright, the system believes that "the innovation of internationally recognized sports event copyright lies in emphasizing the protection of the uniqueness and value of sports events, and providing comprehensive copyright protection for sports events through a series of measures. This also provides a better platform for protecting the interests and expanding business opportunities of sports brands, advertisers, and audiences." The author believes that sports events have copyright, that is to say, sports events should be works, so sports events should have originality rather than uniqueness and value. Finally, in terms of intellectual property protection for sports technology, the Chat GPT system believes that there are "patents, trademarks, copyrights, non-compete agreements, and confidentiality agreements." The author believes that sports technology is not suitable for patent protection, and if a patent is applied, the technology will be difficult to promote and use. Moreover, the academic community mostly opposes the formation of patents for sports technology. In addition, out of the 20 simple questions, there are still 3 questions that score 0 points: (1) Is the sports intellectual property equivalent to the intellectual property of sports? (2) Can sports technology be patented? (3) What is the reason for believing that sports technology cannot be patented? Firstly, regarding whether sports intellectual property is equivalent to sports intellectual property, the Chat GPT system believes that "sports intellectual property and intellectual property of sports are essentially the same, as they both refer to ownership or control of intellectual achievements or innovations related to sports." The author strongly disagrees with this viewpoint. Because, according to the literature on sports intellectual property, it can be seen that sports intellectual property is related to sports and includes all sports products, sports services and the intellectual property of sports themselves, while intellectual property of sports specifically refers to the intellectual property of sports itself, such as sports events, sports performances, and sports activities. The second and third issues are relevant and renewable. As mentioned earlier, the author does not agree that sports technology can be patented, but the author agrees that some winning sports technology can be protected as a technical secret.

2.2. Analysis of General Question Answers

Table 2. General Question Answers

Answer	Wrong	Half wrong	Correct
Score	0	1	2
Frequency	1	7	12

According to the research design, the second type of question mainly examines issues such as institutions and concepts, namely a series of issues such as principles, rules, and values that should be followed when dealing with international sports intellectual property disputes. From Table 2, it can be seen that the error rate of general problems has increased compared to simple problems. There are a total of 8 answers to incorrect and half incorrect questions. Among them, there are 1 completely incorrect question and 7 partially incorrect questions; There are 12 correct answers. From the analysis of the right and wrong answers to the questions, the Chat GPT system can correctly explain the value and role of the basic theory and legal system of sports intellectual property in handling international sports intellectual property disputes. As for the answer to the question "What is the impact of sports intellectual property theory on the handling of international sports intellectual property cases?", the system points out that "sports intellectual property theory plays an important role in the process of handling international sports intellectual property cases. It can guide case resolution, improve intellectual property knowledge, and even provide legal basis, what are the main legal basis for international sports intellectual property disputes? "The system lists WTO agreements, World Intellectual Property Organization conventions, precedents of the International Court of Sports Arbitration, and legislation related to intellectual property in various countries. And it is summarized that global intellectual property international agreements, third-party institutions, and national legislation should all be comprehensively considered. However, the answer is not perfect when dealing with international sports intellectual property disputes by following corresponding principles. This system cannot elaborate on the principles and content of international sports intellectual property rights, nor does it distinguish between basic principles and specific principles. According to the theory of international intellectual property law, the basic principles include the principle of regionalism, the principle of balance of interests, and the principle of coordination and common development; The specific principles include the principle of national treatment, the principle of most favored nation treatment, and the principle of priority. The Chat GPT system believes that "the basic principles of international intellectual property mainly include the principle of national treatment, the principle of most favored nation treatment, the principle of organization, the principle of international autonomy, and the principle of public interest." Finally, in the wrong answer, there is only question 16. This question requires answering the basic theory of sports event copyright. The academic community generally believes that there are two theoretical systems for sports event copyright: authorship and copyright. The system believes that there are five theories on sports event copyright: intellectual property theory, bonus theory, public interest theory, network technology theory, and contract theory. It can be seen that the Chat GPT system cannot provide good answers to the issues of principles and basic concepts of sports intellectual property in the handling of international sports intellectual disputes, although the system also recognizes the importance of these issues.

2.3. Analysis of Difficult Question Answers

Table 3. Answers to Difficult Questions

Answer	Wrong	Half wrong	Correct
Score	0	1	2
Frequency	4	8	8

From Table 3, it can be seen that out of the 20 questions answered by the Chat GPT system in the third category, there were 4 incorrect answers, 8 half wrong answers, and 8 correct answers. This indicates that as the difficulty of setting questions increases, the accuracy of the Chat GPT system's answers is further decreasing. According to the correct answers, this type of question mainly involves the structure type, basic concepts followed, and specific implementation methods of international sports intellectual property dispute management institutions. Due to the fact that this type of question only involves shallow knowledge in the handling of international sports intellectual property disputes, the answer effect is relatively good. For example, how to determine the jurisdiction of international sports intellectual property cases? "The answer to the Chat GPT system is: In short, when determining the jurisdiction of international sports intellectual property cases, various factors should be comprehensively considered to ensure a fair and effective resolution of disputes. It should be noted that the specific situation may vary from case to case, so it needs to be selected and handled according to the actual situation. Specifically, such as contract agreements, national legislation, dispute nature, and parties' negotiations; According to the answer to the question of both right and wrong, this type of question mainly involves the concept of collaboration among different institutions in the handling of international sports intellectual property disputes, as well as the mechanism for cooperation and execution. For example, "What is the mechanism for joint governance of international sports intellectual property rights? "The Chat GPT system only answers the organizations of various international sports intellectual property disputes, such as WIPO, WTO, CAS, etc., but does not explain their operation mechanism and how they cooperate with each other. Finally, the questions involved in the wrong answer mainly include the theoretical basis of international sports intellectual property rights, the cases resolved by international sports intellectual property dispute resolution agencies, and the cooperation and collaboration between different dispute resolution agencies. This indicates that there may not be much research on the basic theories of international sports property rights, and there are not many cases handled by international sports intellectual property institutions. Therefore, there is relatively little research on the cooperation of relevant institutions in handling international sports intellectual property disputes.

In view of this, this study will conduct multiple rounds of Q&A on such erroneous questions, explore and research through relevant or similar questions, and form a solution to international sports intellectual property disputes.

3. Multiple Rounds of Q&A on Questions with Scores of 0 and 1

Conduct a second round of Q&A for questions with incorrect or incomplete answers, and the simple question group answers all correctly, while the 16th question group is not answered correctly, and the difficult question group has 3

questions answered incorrectly. Then, a third round of Q&A was conducted, and the result was that the 16th question in the general question group was answered correctly, while the 3 questions answered incorrectly in the difficult question group were still answered incorrectly. From the overall effectiveness of answering questions, the Chat GPT system can better answer the general concepts, jurisdiction systems, collaborative relationships, basic concepts, and logical relationships among international sports intellectual property disputes. The questions that cannot be answered involve specific cases solved by sports intellectual property organizations. This may be due to the limited number of sports related intellectual property cases, or they can resolve these cases through negotiation, or they believe that they cannot be handled through specialized institutions.

4. Introduction to the Multi Round Q&A Strategy of Chat GPT System

The multi round Q&A strategy of the Chat GPT system is as follows: Firstly, select the research question. The prerequisite for solving problems is to set up research questions, and relevant questions should be listed comprehensively as much as possible. If dealing with international sports intellectual property rights, it is necessary to explore the relevant management institutions, jurisdiction methods, legal systems, enforcement methods, resistance factors, professional terminology, basic theories, and other contents related to international sports intellectual property rights; Secondly, group research questions. Grouping research content can achieve coherence in the research process, which helps to efficiently solve scientific research problems. You can group according to the difficulty level of the problem, or you can group according to the similarity of the research. This study is grouped based on the principle of balancing difficulty and similarity, dividing the problem into three levels: simple, general, and difficult; Thirdly, consult on relevant research issues. The Chat GPT system provides explanations in the order of questions. Record any unresolved issues and continue with Q&A in the next round until they are resolved. If the answer cannot be answered correctly in the third round, ask multiple times using a similar expression. If the answer is the same and incorrect, it is considered unsolvable.

5. Conclusion

The Chat GPT system answers the basic theoretical cognitive issues of sports intellectual property, the basic conceptual issues of international sports intellectual property treatment, the issues of jurisdiction and enforcement methods, and the issue of how relevant entities collaborate. In terms of theoretical understanding of sports intellectual property rights, it is explained that sports intellectual property rights are different from intellectual property rights of sports. In terms of the basic concept of international sports knowledge, this paper explains the value of the basic principles and specific principles of international intellectual property law for international sports intellectual property disputes. In terms of the jurisdiction and enforcement of international sports intellectual property rights, the Chat GPT system believes that the governing bodies for international intellectual property disputes include the International Court of Arbitration for Sport (CAS), the World Intellectual Property Organization (WIPO), and the European Patent Office (EPO). And it is pointed out that the management and execution agencies may

not necessarily be the same, and various institutions and rights holders can cooperate with each other. And specific methods for how they cooperate are provided. Therefore, the Chat GPT system can effectively explore and solve the problems encountered in international sports intellectual property rights.

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