

# Research on Olympic Spirit and Sports Politicization Limit under the Background of Network Public Opinion

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**Abstract.** With economic globalization, cultural diversity and integration have become a necessity. The Olympic movement is not only a universal sports participation of all countries, but also a multi-cultural integration of the spirit of equality. The purpose of the Olympic movement is to spread the Olympic ideal, incorporate sports as a cultural awareness into the process of human life, educate young people from a new perspective and in a new way, and promote the harmonious development of their body and mind. Olympic culture is rich in connotation, mainly embodied in six aspects: harmonious development, unity and friendship, fair competition, emphasis on participation, hard work and glory for the country. It reflects the pursuit of truth, goodness and beauty, and is a precious wealth of mankind. The Olympic spirit requires mutual understanding, solidarity and fair competition. The purpose of the Olympic Games is to make sports serve the harmonious development of people around the world, so as to promote the establishment of a peaceful society that upholds human dignity. Its ultimate goal is to contribute to building a peaceful and beautiful world. This sports culture is closely linked with regional nationalism, so that regional culture can be displayed on the world's sports platform and the world can enjoy your advanced culture. From the perspective of time, this kind of sports spirit is historical and epochal. Its history determines its stability and invariability, and its time determines its adjustability and changeability. From the perspective of sports history, sports have always been in an unstable balance structure with politics, and the form of sports politicization is also attacking everywhere, flickering bright and dark, and swinging left and right. Therefore, we believe that "sports politicization" is a complex object.

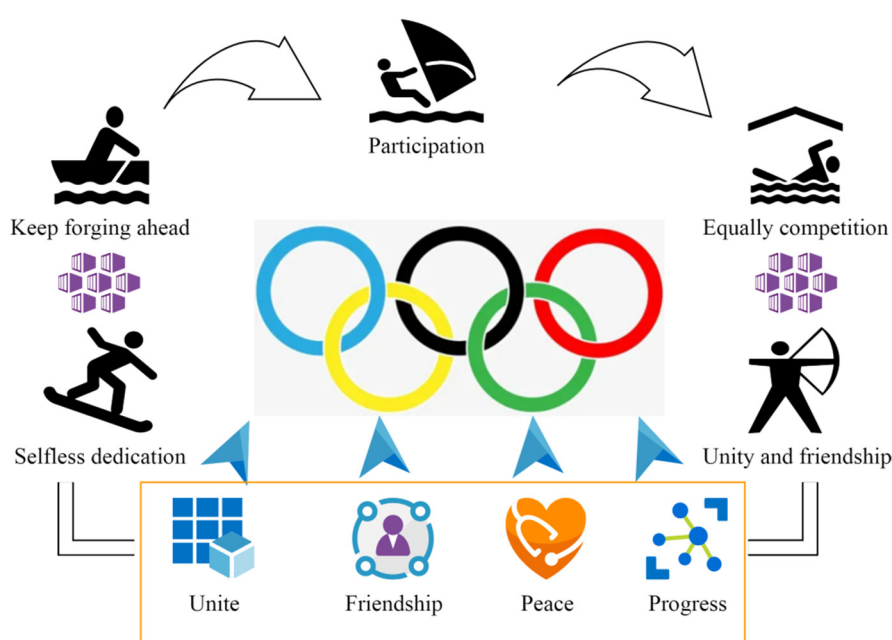
**Keywords:** Internet Public Opinion; Olympic Spirit; Politicization of Sports.

## 1. Introduction

With economic globalization, cultural diversity and integration have become a necessity [1]. The Olympic movement is not only a universal sports participation of all countries, but also a multi-cultural integration of the spirit of equality [2]. The purpose of the Olympic movement is to spread the Olympic ideal, incorporate sports as a cultural awareness into the process of human life, educate young people from a new perspective and in a new way, and promote the harmonious development of their body and mind [3]. Olympic culture is rich in connotation, mainly embodied in six aspects: harmonious development, unity and friendship, fair competition, emphasis on participation, hard work and glory for the country [4]. It reflects the pursuit of truth, goodness and beauty, and is a precious wealth of mankind. The Olympic spirit requires mutual understanding, solidarity and fair competition. The purpose of the Olympic Games is to make sports serve the harmonious development of people around the world, so as to promote the establishment of a peaceful society that upholds human dignity [5]. Its ultimate goal is to contribute to building a peaceful and beautiful world. This kind of sports culture is closely linked with regional nationalism, so that regional culture can be displayed on the world sports platform Let the world enjoy your advanced culture [6]. From the perspective of time, this kind of sports spirit is historical and epochal. Its history determines its stability and invariability, and its time determines its adjustability and changeability [7]. From the perspective of sports history, sports have always been in an unstable balance structure with politics, and the form of sports politicization is also attacking everywhere, flickering bright and dark, and swinging left and right. Therefore, we believe that "sports politicization" is a complex object [8].

## 2. The Content and Characteristics of Olympism

Olympism is a social ideology, a spiritual wealth and intangible cultural heritage created by mankind, and an international cultural element that promotes social progress, improves human quality, builds a harmonious society and maintains world peace [9]. It should fully embody and reflect the purpose of Olympism and the guiding ideology and incentive factors of all activities of the Olympic movement [10]. Olympism seeks to integrate sports with culture and education, and create a lifestyle that seeks joy in efforts, plays an educational role of a good example, and respects basic principles [11]. On the basis of this idea, the Olympic movement is endowed with strong educational and cultural values. The Olympic movement has made important contributions to human civilization. Its spirit includes five aspects (as shown in Figure 1): 1. Focus on the spirit of participation. 2. The spirit of continuous progress. 3. Spirit of fair competition. 4. The spirit of unity and friendship. 5. Selfless dedication.



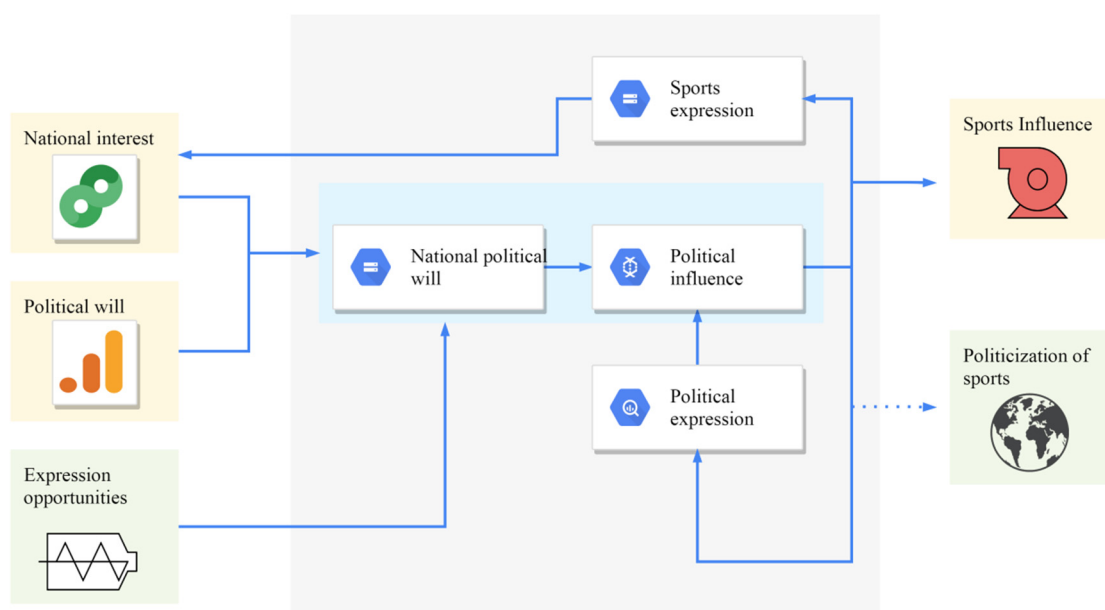
**Figure 1.** Spiritual connotation of Olympism

Sports constructs a fictional world, provides an image that can be projected psychologically, and constructs a way of self-satisfaction through feeling and association. Therefore, sports can release depression, easily form a sense of identity and belonging, and enhance communication opportunities. The Olympic Games show the highest level of strength and beauty through sports competition. In essence, it is to show people the spiritual value and pursuit of people. It contains a very deep philosophy and cultural heritage. It can let people experience and understand the true meaning of life through intuitive and perceptual ways, so as to guide people to a happy and complete life. Athletes' noble moral outlook of striving hard, abiding by disciplines and laws, fair competition, and not being arrogant in victory and discouraged in defeat. Referees are impartial and strictly enforce the law. The audience is full of enthusiasm, cheering not only for the winners but also for the losers. All these moving scenes can concretely embody the Olympic spirit. The value standard of sports spirit is based on the value orientation of sports spirit, combined with the composition of sports spirit, and extracted from them the key words that best represent their spiritual characteristics, and then summarized.

## 3. Politicization of Sports

The reasons for "politicization of sports" are very complex and there are many factors. Therefore, we need to put sports in a broader perspective and discuss the relationship between sports and politics

in a complex historical situation, especially in the multiple relationships of national interests, economy, culture and national relations, so that we can get the truth. Sports and politics are closely related, which originates from the obligation of the state to protect citizens' sports rights. However, the functions of the state are limited to this, and cannot add more political functions to sports. Because sports right belong to social right in nature, it cannot replace the function of freedom right, and the state cannot instill its political concept with sports. The political power of sports is rooted in the growth of the organizational power of sports institutions. Sports not only shows its myth, but also enables political and emotional elements to find a foothold, which can be seen from the politicized structure of sports (Fig. 2). Politics needs to be performed. For example, the modern Olympic Games is a huge performance venue. The "sports United Nations" model provides a stage for all politics and politicians to perform. Sports performance also represents the political demands in a concentrated way.



**Figure 2.** The politicized structure of sports

The development of sports activities usually requires special venues, special equipment, guidance and cooperation of professionals, and even the organization and coordination of relevant functional departments. These conditions cannot be achieved by the personal strength of the oblige alone. Therefore, compared with those rights that can be realized mainly by virtue of their own actions, the realization of sports rights must be premised on the provision of certain material guarantees by the state. However, the social functions undertaken by the state are still limited. Because if the state does too much, it is bound to have great power, and power is always harmful to rights. Therefore, the state is playing a role where civil liberties are inferior, and its task is only to make up for the defects caused by the overflow of freedom.

Today's sports are being deconstructed, melted and subverted day by day under the melting of politics, the corrosion of commercial market and the immersion of instrumental thoughts. Due to the complexity and sensitivity of the relationship between sports and politics, the game between sports and politics must be a dynamic game process under the condition of incomplete information. The Olympic Charter states that the purpose of the Olympic movement is to educate young people through sports activities that are free of any discrimination and have the Olympic spirit - friendship, solidarity and fairness, so as to contribute to the building of a peaceful and better world. Working for world peace is an independent political function in itself. Therefore, it is inevitable that countries or regions will go beyond the boundaries we have just mentioned and play more roles, and even use sports to achieve political goals. In the context of globalization, competitive sports have become more professional, more transparent in various sports technologies and information, and more and more

dependent on high technology for support of various technologies and equipment, which makes it difficult to climb to the world summit of competitive sports by relying on individual strength. In this case, we must rely on the government's regulation and control of the state's financial resources, and it is precisely because of such a model that the government supports competitive sports, produces certain political effects and urges the government to continue to support competitive sports, which promotes the closer relationship between competitive sports and politics.

#### 4. Algorithm Introduction and Case Analysis

In the Internet age, social media represented by micro blog has greatly stimulated the public's interest in watching, commenting and sharing sports events. Sports event public opinion is exactly the emotional tendency and opinion expression of netizens on sports events. It is the result of convergence, collision, communication and interaction in the micro blog field. Therefore, emotional analysis can reveal and explain the emotional characteristics and evolution laws of public opinion in sports events, which is of great significance to the research of public opinion in sports events. The analysis formula is as follows:

$$Q(t) = \frac{1}{k|\vec{v}_{\max}|} \sum_{i=1} |\vec{v}_i(t)| \quad (1)$$

The structural characteristics of the network can also be described by the in degree centrality and out degree centrality of the whole network. The closer the value is to 1, the more centralized the network is, and vice versa. The task scheduling of the sports network video processing platform is crucial for the platform application and users, and is the key technology to improve the platform performance. Task scheduling is a reasonable scheduling between different processing nodes and tasks to reduce task completion time and improve system efficiency. According to different optimization problems, the fitness function is used to evaluate the position of each particle, and the following formula is used to update the particles until the results meet the set termination conditions or reach the set maximum number of iterations.

$$x_{i+1} = x_i \prod_{i=1} (x_{im}^k + x_{im}^{k+1}) \quad (2)$$

In the formula,  $x_{im}^k$  and  $x_{im}^{k+1}$  respectively represent the best position in the history of the particle and the best position of the whole population particle when the number of iterations of the population is  $k$ .

Node centrality is a value that measures other users who have an interest relationship with each node. The larger the value, the more central the node is, and the more resources and power it has in the propagation process. The measurement of the intermediary centrality of all nodes in a network can reflect the degree of "centralization" of a social network. It is assumed that  $\omega$  is an inertia weight coefficient. It is to avoid the infinite increase of particle velocity, and it is also a key parameter that affects the search results and convergence speed. The detailed search can be carried out in a small local range. Formula (3) is an updated formula of  $\omega$ :

$$w = \omega_1 + (\omega_1 - \omega_0) \cdot k \cdot \frac{1}{k_{\max}} \quad (3)$$

In complex high-dimensional optimization, the global best particles are easy to fall into local minima, so only using the global best particles to guide the whole particle swarm will make the algorithm very easy to fall into local optimization. In the process of evolution, not only the historical best position and the global best position of the particle itself, but also the evolution of the overall

trend of the particle should be considered. Where,  $\omega_0$  and  $\omega_1$  are the initial iteration value and the end iteration value of the inertia weight coefficient,  $k$  is the current iteration number of the algorithm, and  $\frac{1}{k_{\max}}$  is the maximum iteration number set by the algorithm.

The intermediary centrality of the overall network is to examine whether there is "centralization" in a social network. The star network has a 100% intermediary centrality index, while the intermediary centrality of the ring network tends to be 0. Table 1 lists the centrality of the forwarding user's online store.

**Table 1.** Forwarding user network point centrality

Node	Username	Centrality	Satandard value
25	A	0.22	0.5
741	B	0.65	0.19
36	C	0.85	0.38
145	D	0.18	0.42
29	E	0.26	0.45
125	F	0.00	0.00
65	G	0.00	0.00
14	H	0.00	0.00
23	G	0.00	0.00

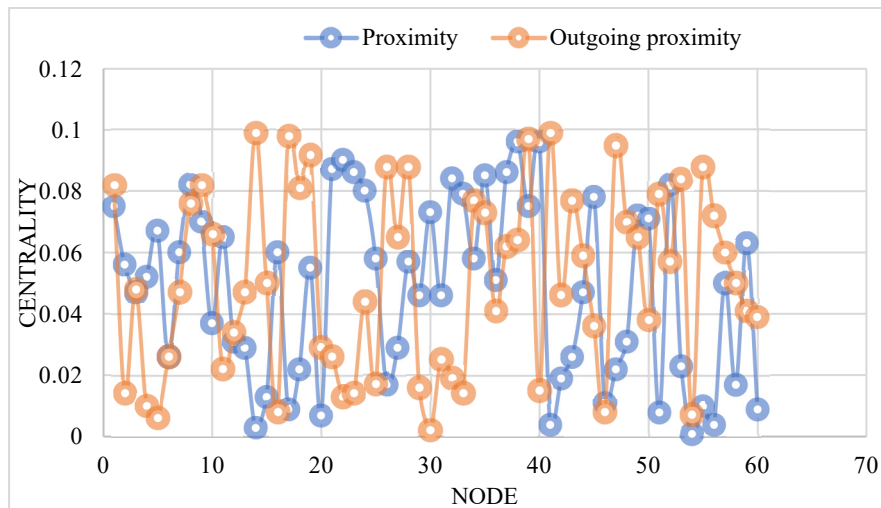
It can be seen from the above table that many nodes have a value of 0, which indicates that ordinary nodes do not promote the diffusion of information throughout the network. In addition, the standardized intermediary centrality of the whole network is 0.08%, approaching 0, which indicates that although there are individual nodes with high control ability in the whole network, on the whole, it has the balanced characteristics of a ring network. This shows that although the network has a certain trend of concentration, it does not show a trend of concentration to a certain node, but has multiple centers. In addition, the distance difference between important nodes in the network is not obvious, there is no super node that absolutely controls other nodes, and the interdependence and nesting between nodes are prominent.

In order to reduce the amount of calculation, increase the calculation speed and speed up the convergence of the algorithm, use the formula to update the particle velocity. In order to achieve the above purpose, a function whose function value decreases linearly with the increase of the number of algorithm iterations is designed. The formula is as follows:

$$N_k = 1 - \frac{k}{K_{\max}} \tag{4}$$

At the end of the algorithm iteration, all particles in the particle swarm are guided by the global best particles and will gradually tend to the global best position. If the algorithm has found the optimal solution, all particles will gather near the optimal solution position, so that their fitness values tend to be equal.

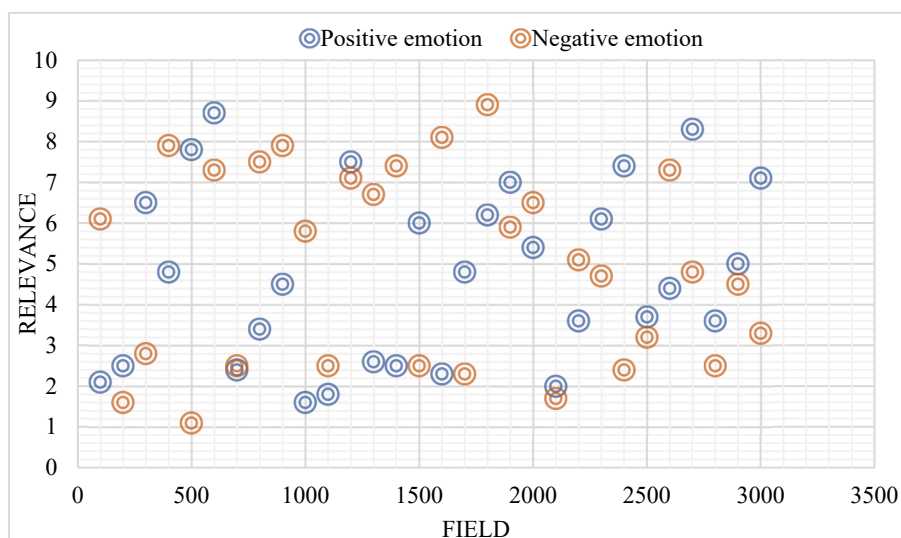
"Proximity Centricity" is a measure of the ability of a node in a network that is not controlled by other nodes. The higher the value, it means that the distance between the node and other nodes is close, indicating that it is at the center of the network, and the freedom of information dissemination is higher. Along the "degree"- "proximity" path, the proximity center of each node can be obtained, as shown in Figure 3 below.



**Figure 3.** User network node proximity centrality data

It can be seen from Fig. 3 that the in-degree centrality and out degree centrality of the whole network are 84.12% and 47.52% respectively, which indicates that the network has a clear tendency of concentration in terms of in degree, that is, a small number of nodes have received the attention of most nodes. The information dissemination ability of the central node, the ability to control other nodes, and the distance determine the structural characteristics of the relationship network, as well as the communication range, scale and influence of sports event public opinion. There are many participants in the commercial sports event network, and these many input supply departments and product resources consumption subjects have direct contact with the sports event production department. They are all connected with each other through the event production department without direct economic relations.

Then the subjective information is classified twice, that is, emotion polarity classification and multi category emotion subdivision. It is found that the emotional polarity of sports events is mainly positive, including happiness, excitement, happiness, pride and other emotional experiences, but there are also negative emotions, such as sadness. These emotions are divided into positive and negative categories for quantitative analysis, as shown in Figure 4 below:



**Figure 4.** Sentiment analysis of online public opinion

The expression of opinions during sports events is often accompanied by emotional contagion. Individual instinctive emotions are rapidly spread by means of links between nodes, and emotional contagion will attract more links to join in the spread, resulting in a circular spread of group

"Empathy". This collective emotional resonance constitutes the social power of the public opinion dissemination of the event. The sparsity of the network reflects the low-density characteristics of the commercial sports event network. The governance of Internet public opinion is to implant the governance concept and theory into the management of cyberspace, so as to realize the co-governance pattern of multiple subjects. It reflects the modernization of the national governance system and governance capacity, and its ultimate goal is to achieve the ecological balance of online public opinion.

## 5. Conclusion

To be sure, there are many reasons for the politicization of sports. Sports influence is the supporting point of sports politicization, and sports influence gives space and possibility for political development. Similarly, sports influence gives the national interest the choice of "Rent-seeking", and the national interest finds a field to play through sports platforms. The formation mechanism and framework structure of sports organizations show a power structure, which makes it difficult for sports to get rid of its political entanglement. On the contrary, these institutions themselves give impetus to the politicization of sports. The Olympics is not a political purpose imposed on sports outside of sports, and will not make sports a slave of politics. It stands on the basis of sports neutrality to promote the development of politics in a good way, and is the assistance of sports to politics. Using policy guidance as a "hard constraint" to solve the problem of online sports public opinion, and guiding the audience's stereotyped thinking, is particularly important in the supervision of online sports public opinion. Solve the specific problems in reality from the root, eliminate the risk source of polarization of sports public opinion, deeply understand the nature of the event, effectively handle the contradictions of sports interests in real society, and solve sports social problems.

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