



SOCIAL NETWORK, INSTITUTIONAL ENVIRONMENT AND ORGANIZATIONAL LEGITIMACY OF SPORTS ASSOCIATION IN JIANGSU PROVINCE IN CHINA

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ABSTRACT

The purpose of this study were explored on legitimacy of sports associations as: 1) The impact of network size, 2) The impact of network heterogeneity, 3) The regulatory role of institutional environment between network size and legitimacy, and 4) The regulatory role of institutional environment between network heterogeneity and legitimacy. This study conducted a large sample questionnaire survey of 626 municipal sports associations in Jiangsu Province, adopted the simple random sampling method, and finally selected 244 valid research data of questionnaires. Statistical software was used for empirical analysis of the data, and descriptive statistical analysis, Pearson correlation analysis, factor analysis and multiple linear regression analysis were used. The results show that most of the hypotheses proposed in this study are supported. The main conclusions include: The larger network size is conducive to the acquisition and maintenance of organizational legitimacy of sports associations, network heterogeneity has a positive impact on the realization of regulatory legitimacy and normative legitimacy. Institutional environment is conducive to strengthening the organizational legitimacy, and institutional environment positively regulates the impact of network size on regulatory legitimacy and normative legitimacy. Institutional environment reversely moderates

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the impact of network heterogeneity on organizational legitimacy.

Keywords: social network, organizational legitimacy, institutional environment, sports association.

INTRODUCTION

China's sports associations at all levels have experienced the development from less to more, from weak to strong, and gradually become an irreplaceable important part of the sports organizational structure (Tao, 2010). Sports associations are playing an increasingly important role in promoting the effective connection between sports administration and sports autonomy, transforming sports development modes and building a diversified public sports service system (Pei, 2019). The origin of such sports system architecture causes Chinese sports associations to be different from western sports associations, forming their own unique development path and operation logic (Wang, 2008).

It also gradually exposed some significant problems of organizational legitimacy, such as the incomplete sports management system, the imperfect legal system and the lack of effective management and supervision (Wang et al., 2010). The legal nature and positioning are vague, and there is a lack of systematic construction planning and institutional restriction (Yu, 2012). The legal and reasonable principle of autonomous behavior is lacking, and the combination of autonomy and government regulation is not standardized (Yin, 2011). Hierarchy management of associations leads to weak contact between associations and members (Wang et al., 2010), lack of good interaction between associations and the public, and lack of sufficient social credibility (Li, Ji & Yu, 2013). The problem of organizational legitimacy of sports associations has not attracted wide attention from scholars.

RESEARCH OBJECTIVES

1. To study the impact of social network size on legitimacy of sports associations.
2. To study the impact of social network heterogeneity on legitimacy of sports associations.
3. To study the regulatory role of institutional environment in the impact of network size on legitimacy of sports associations.
4. To study the regulatory role of institutional environment in the impact of network heterogeneity on legitimacy of sports associations.

THEORETICAL BACKGROUND AND HYPOTHESIS

Social Network

Social network theory has been widely used in the field of management research. Network size refers to the total amount of interactive relations owned by sports associations, while network heterogeneity refers to the degree of differentiation of social relations owned by sports associations in industries, fields, status, etc. (Song & Chen, 2021).

Organizational legitimacy

Since the 1990s, the theoretical system of organizational legitimacy has gradually taken shape. Scott (2008) believes that regulatory elements, normative elements and culture-cognitive elements in the system provide support for legitimacy.

Institutional Environment

According to the new institutionalism theory, the preferences and actions of individuals or organizations are embedded in specific social structures, and the institutional environment will affect their actions (Meyer & Rowan, 1977). No matter in terms of legitimacy or resource acquisition, both will be deeply influenced by the institutional environment (Zhang & Zhang, 2020).



Network size and organizational legitimacy

Network size is the most intuitive standard to measure the dimension of social network (Burt, 2004). Therefore, the following research hypotheses are proposed:

H1: There is a positive correlation between network size and organizational legitimacy of sports associations.

H1a: There is a positive correlation between network size and regulatory legitimacy of sports associations.

H1b: There is a positive correlation between network size and normative legitimacy of sports association norms.

H1c: There is a positive correlation between network size and cognitive legitimacy of sports associations.

Network heterogeneity and organizational legitimacy

Network heterogeneity is the degree of social network members' differences in social status, individual characteristics, occupational characteristics and other aspects (Scott, 2002). Therefore, the following research hypotheses are proposed:

H2: There is a positive correlation between network heterogeneity and organizational legitimacy of sports associations.

H2a: There is a positive correlation between network heterogeneity and regulatory legitimacy of sports associations.

H2b: There is a positive correlation between network heterogeneity and normative legitimacy of sports association norms.

H2c: There is a positive correlation between network heterogeneity and cognitive legitimacy of sports associations.

The regulatory role of institutional environment

Institutional environment shaping the social organization of the morphological characteristics, role in the social life and position in the social relations (Jiang & Liu, 2020). Therefore, the following research hypotheses are proposed:



H3: Institutional environment plays an important regulating role between network size and organizational legitimacy of sports associations.

H3a: Institutional environment positively regulates the effect of network size on regulatory legitimacy of sports associations.

H3b: Institutional environment positively regulates the effect of network size on normative legitimacy of sports association norms.

H3c: Institutional environment positively regulates the effect of network size on cognitive legitimacy of sports associations.

H4: Institutional environment plays an important regulating role between network heterogeneity and organizational legitimacy of sports associations.

H4a: Institutional environment positively regulates the effect of network heterogeneity on regulatory legitimacy of sports associations.

H4b: Institutional environment positively regulates the effect of network heterogeneity on normative legitimacy of sports association norms.

H4c: Institutional environment positively regulates the effect of network heterogeneity on cognitive legitimacy of sports associations.

RESEARCH FRAMEWORK

The research framework of this study from literature review of books, text, and articles based on Suchman (1995), Scott, (2008), Lu (2016), Jiang and Liu (2020), as shown in Figure 1.

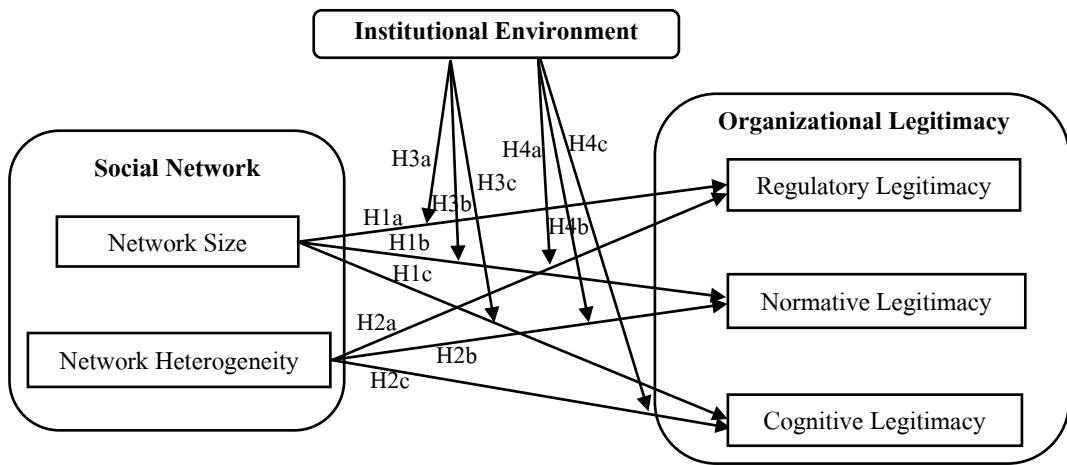


Figure 1. Research Framework

RESEARCH METHODOLOGY

Participants and Procedures This study takes 626 sports associations in 13 cities of Jiangsu province as the research object. By Jiangsu Province Sports Federation sent each association one questionnaire, questionnaire to fill in requirement must be this association members, and explained to them clearly that the purpose of this study was to understand the impact of social network on legitimacy of sports association, ensure every respondent personal information will not be leaked, sports association can get the results of feedback. Through sending 626 questionnaires to 626 sports associations, 531 questionnaires were finally collected. After 28 unqualified questionnaires were removed, 503 qualified questionnaires were obtained, and the effective questionnaire recovery rate was 87.9%. This study employed the Yamane (1973) formula to compute for the sample size is 244. Therefore, 244 questionnaires were randomly selected from 503 valid questionnaires.

Measures Through the test of statistical software, the results show that the KMO value of each variable is greater than .734, factor load factor of each item is between .728 and .920, and the minimum value of



Cronbach's α is .837, indicating that the scale and data used in this study have high quality.

Network Size Network size measurement indicators of four items, such as: "This association can contact the number of government agencies and departments"; "Number of Non-governmental organizations (companies, sponsors) that this association can contact". This study uses Likert 5-point scale from 1 (very little) to 5 (very much). Cronbach's α was .806 for this scale.

Network Heterogeneity The measurement indicators of network heterogeneity are four items, which are expressed as: "The degree of difference in the social background of participants with whom this association regularly contacts"; "The degree of variation in the field of involvement of non-governmental organizations (corporations, sponsors) with which this association is in frequent contact". This study uses Likert 5-point scale from 1 (very low) to 5 (very high). Cronbach's α was .797 for this scale.

Organizational Legitimacy Based on Suchman (1995), Deephouse (1996), Scott (2008) legitimacy study, organizational legitimacy of sports associations is measured from three dimensions of regulatory legitimacy, normative legitimacy and cognitive legitimacy, with five questions for each dimension.

Institutional Environment To measure the institutional environment, refer to the scale developed by Jiang and Liu (2020). An example of the item is "Local government departments formulate and implement effective laws and policies to safeguard the development interests of this association." Cronbach's α was .734 for this scale.

RESEARCH RESULTS

Descriptive statistics and Confirmatory factor analysis

Descriptive statistics and correlation analysis are shown in Table 1.



Table 1. Descriptive statistics and correlations.

| Variable | \bar{X} | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------|-----------|-------|---------|--------|--------|--------|--------|--------|--------|---|
| 1 YE | 2.91 | 1.209 | | | | | | | | |
| 2 NM | 3.56 | 1.589 | .309** | | | | | | | |
| 3 NS | 3.35 | .887 | .195** | .397** | | | | | | |
| 4 NH | 3.12 | .648 | .081* | .193** | .532** | | | | | |
| 5 RL | 4.28 | .596 | .086* | .351** | .471** | .401** | | | | |
| 6 NL | 4.36 | .601 | .036* | .293** | .384** | .371** | .621** | | | |
| 7 CL | 4.25 | .619 | .079** | .340** | .483** | .382** | .687** | .643** | | |
| 8 IE | 4.01 | .798 | .068*** | .261** | .477** | .443** | .628** | .641** | .638** | |

N=244. YE years of establishment, NM number of members, NS network size, NH network heterogeneity, RL regulatory legitimacy, NL normative legitimacy, CL cognitive legitimacy, IE institutional environment.

* $p < .05$, ** $p < .01$

Hypothesis testing

In order to test the hypothesis, SPSS 25.0 analysis software was used for regression analysis. Before the variable analysis, data were processed mean centering, and the results were shown in Table 2.

Table 2. Regression Analysis Results

| Variables | R L | | | | N L | | | | C L | | | |
|--------------------------------|-----------|-----------|------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|------------|------------|
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 | Model 9 | Model 10 | Model 11 | Model 12 |
| Control variables | | | | | | | | | | | | |
| YE | -.004 | -.038 | -.030 | -.029 | -.014 | -.038 | -.039 | -.037 | .033 | -.004 | .006 | .003 |
| MN | .369*** | .205*** | .167*** | .169*** | .349*** | .207*** | .166*** | .160*** | .339*** | .161*** | .117*** | .109*** |
| Independent variables | | | | | | | | | | | | |
| NS | | .356*** | .163*** | .163*** | | .281*** | .052 | .055 | .393*** | .132*** | .131*** | |
| NH | | .161*** | .063* | .072* | | .177*** | .063* | .078* | .152*** | .026 | .029 | |
| Regulated variables | | | | | | | | | | | | |
| IE | | | .501*** | .513*** | | | .576*** | .582*** | | .668*** | .659*** | |
| Interaction terms | | | | | | | | | | | | |
| IE×NS | | | | .105** | | | | .087** | | | | .041 |
| IE×NH | | | | .-069* | | | | .-085** | | | | .-071** |
| <i>R</i> ² | .133 | .320 | .493 | .501 | .118 | .261 | .493 | .506 | .127 | .328 | .643 | .647 |
| Adjusted <i>R</i> ² | .131 | .317 | .482 | .493 | .109 | .253 | .490 | .496 | .121 | .330 | .639 | .644 |
| Δ <i>R</i> ² | .133 | .181 | .179 | .006 | .113 | .139 | .236 | .007 | .128 | .205 | .313 | .007 |
| <i>F</i> | 52.687*** | 73.646*** | 127.427*** | 87.377*** | 40.178*** | 52.638*** | 121.384*** | 93.262*** | 44.339*** | 78.672*** | 231.238*** | 167.537*** |
| VIF Max | 1.106 | 1.538 | 1.577 | 1.577 | 1.008 | 1.533 | 1.535 | 1.535 | 1.007 | 1.602 | 1.535 | 1.535 |

N=244. YE years of establishment, NM number of members, NS network size, NH network heterogeneity, RL regulatory legitimacy, NL normative legitimacy, CL cognitive legitimacy, IE institutional environment.

*p<.05, **p<.01, ***p<.001

Test collinearity In the process of regression analysis, the results show that the maximum value of *VIF* of each regression model is 1.602, indicating that there is no serious collinearity in the data of this study.

As a control variable, member number is first included in the regression model, and there is a significant positive relationship between member number and the three legitimacy dimensions of regulatory legitimacy, normative legitimacy and cognitive legitimacy ($\beta = .369, p<.001$; $\beta = .349, p<.001$; $\beta = .339, p<.001$).

There is a significant correlation between network size of sports associations and regulatory legitimacy, normative legitimacy and cognitive legitimacy ($\beta = .356, p<.001$; $\beta = .281, p<.001$; $\beta = .393, p<.001$). H1a, H1b and H1c were verified. Some scholars research shows that social network size is larger, the more conducive to social organizations get more social



relations and the development of resources, to strengthen its own organizational legitimacy (Yu & Mei, 2014).

There is a significant correlation between network heterogeneity of sports association and regulatory legitimacy, normative legitimacy and cognitive legitimacy ($\beta = .161, p < .001$; $\beta = .177, p < .001$; $\beta = .152, p < .001$). H2a, H2b and H2c were verified. Heterogeneity represents the degree of interaction between different social backgrounds that social organizations have (Song & Chen, 2019; Zhang, 2013).

Institutional environment support and effective government relations have a significant positive impact on the development of non-profit organizations (Mayer, 1984), also have a profound impact on the legitimacy of organizations (Zhang & Zhang, 2020). This view is also verified in this study. There are significant correlations between institutional environment and the three dimensions of organizational legitimacy ($\beta = .501, p < .001$; $\beta = .576, p < .001$; $\beta = .668, p < .001$).

The interaction terms between institutional environment and network size are significantly positively correlated with regulatory legitimacy and normative legitimacy ($\beta = .105, p < .01$; $\beta = .087, p < .01$). H3a and H3b were verified. This results and Xu, Lu and Wang (2016) research conclusion is consistent. In a certain system environment, the stronger the ability system of social organization and the environment interaction, the more likely to win the support of government departments and agencies and recognition, the higher the degree of legitimacy and normative validity of rules and regulations, and the expanding of network size and can further enhance the interactive ability. H3c didn't pass the test, the possible explanation is that the institutional environment, although can bring effective policy to social organizations and resources support, provide legitimacy space for the development of social organizations (Zhang, 2014), but not influence the public and government department approval of sports association. Therefore, the regulation of institutional environment to cognitive legitimacy is invalid.

The interaction terms between institutional environment and network heterogeneity are negatively correlated with regulatory legitimacy, normative legitimacy and cognitive legitimacy, H4a, H4b and H4c all fail the test. Social organizations in many European and American countries spontaneously formed from bottom to top with the maturity of civil society. Different from them, China's social organizations have distinctive Chinese characteristics in their formation and development mechanism. The rise of social organizations in China is not only the result of economic and social development, but also the result of the government's selective support. It reflects the strong institutional motivation, and the institutional environment directly affects the survival, development and growth of social organizations (Zhang, 2014). With the strengthening of the regulatory effect of institutional environment, the impact of network heterogeneity on organizational legitimacy of sports associations weakened obviously.

DISCUSSION

This study reveals the impact of network size and heterogeneity on organizational legitimacy of sports associations, and analyzes the regulatory effect of institutional environment, and obtains some innovative research results.

Organizational legitimacy is the basis for the survival and development of social organizations. Organizations with high legitimacy tend to have higher competitive advantages (Bresser & Millonig, 2003; Martin, 2014). The view that institutional environment has a significant effect on social organizations (Chen, 2012; Zhang & Zhang, 2020), which has been further confirmed in the field of sports organization. The larger network size is conducive to the acquisition and maintenance of the organizational legitimacy of sports associations. The higher the degree of network heterogeneity is, the more beneficial it is for sports associations to search for and obtain the necessary funds and human resources, and to promote the construction of regulatory legitimacy and normative legitimacy.



SUGGESTION

Suggestion for use

1. Managers should be clearly aware of the importance of maintaining appropriate size and heterogeneity of social network, reduce unnecessary redundant connections, effectively improve the effectiveness of social network, and establish a broader and closer relationship of mutual trust and mutual benefit, so as to help the association to be in a favorable position in social organization reform.
2. In order to meet the public's demand for sports services, the government will provide more preferential policy support to sports associations. These favorable policies have solved the problems of insufficient funds and lack of talents, and injected endless power for its development. Sports associations should make full use of the dividend of these policies to improve the ability and quality of public sports services, enhance the visibility and influence, and build the value brand of the association.
3. Sports associations should strengthen cooperation and exchange with the outside world according to their own sports advantages, expand cooperation with government agencies, enterprises and other social sports organizations, and actively seek support from enterprises or other social funds, so as to achieve a two-way virtuous cycle of financial independence and enhanced autonomy.

Suggestion for Future Research

In the follow-up research process, we will go deep into the practice of sports social organization and try to use the grounded theory or case analysis to analyze the antecedent variables of organizational legitimacy and the impact of organizational legitimacy on the development of sports social organization.

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