

Chapter 87

Formation Mechanism of Taichiquan Culture Based on Space Panel Measurement Analysis

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Abstract This paper describes Taichiquan culture to form a panel econometric model of the mechanism space on the basis of space effect. This paper selected China Taichiquan popular cities for data sampling, measured by the panel analysis, suggesting that Taichiquan culture during the formation had a strong continuity, and showed a significant effect on the time dimension and space dimension. We analyzed the results from different dimensions to understand the formation mechanism of Taichiquan.

Keywords Taichiquan culture • Formation mechanism • Space panel measurement

87.1 Introduction

In our daily life, we are inseparable from culture everywhere, the concept of culture, due to the broadness, resulting in the word that we can not accurately to define the culture, but we are pressing ahead with efforts, we can go from many angles analysis [1]. Taichiquan culture with other cultures in China are the same, they all belong to the community some kind of phenomenon is the culture created by the Chinese people in the long-term social experience.

Taichiquan is a traditional martial arts project, has a long history in China, has now developed into a sport, a fitness program and become a crowd favourite [2, 3]. Taichiquan Chuan is called Taichiquan, covers the yin and yang in Yi Jing and is movement of the reason, empty or full, growth and decline of the machine [4]. As sport, letting nature take round live sports such as the ring of gratuitous, ad infinitum, endless, spectacular and unpredictable, so people call it Taichiquan [5].

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China's Taichiquan mainly has Chen, Yang, Sun, and Wu style, and Wu Dang, Zhao Bao and other variety of genres. Among them, Chen style, Yang style, Sun style, Wu style, Wu style of the five schools of Chinese Taichiquan Chuan [6].

Taichiquan culture is by no means the shelves of the dry practice a set of boxing. Taichiquan has its rich cultural connotations. Connotation of cultural Taichiquan changes such as yin and yang, light and agile moves, up and down and walk away, internal and external consistency, the actual situation transformation is not our intention force, and has no power at all and so on. Taichiquan culture connotation relies on the awareness and understanding of science to practice Taichiquan to enlightenment, realized the effort. From "proficiency" and "gradual enlightenment to understand the powerful" by "understand the strength and the terraces and the gods", practitioners of the "proficiency" are very important.

87.2 The Taichiquan Culture Formation Process

Taichiquan formation culture process includes the following aspects [7]: (1) Taichiquan intangible cultural development; (2) The shaping of the cultural development; (3) Taichiquan cultural development maturity; (4) Taichiquan development and prosperity; (5) the period of diversification of the Taichiquan cultural development.

Developed for thousands of years, Taichiquan now is throughout the five continents of the world. Taichiquan Chuan from the Qing Dynasty popular in the capital of the Imperial Palace is the most aristocratic origins of the martial arts. Taichiquan really began to compose from the 1963 National Sports Bureau to simplify the 24-style Taichiquan and popularizing the beginning. Taichiquan is ever-changing and invincible, although the action trend is many-fold, outside the virtual, not real, open, or four words. Drill from head to toe, internal organs, meridians muscles, the outer skin, flesh, hair, and limbs; everywhere is connected as one, broken but not open, hit the ghost while playing the instead of chaos to gas urge the deformation. To pull full open, not only hands, hearts of ideas along with open; to closure, not only the hands to the foot together, hearts and the idea with both together. A move of a potential, where the self with the want to move charmed under who want to move on from the collar of God to go where up and down action in the central and God coordinate, where the desire to move up and down the auxiliary ancestral connected both inside and outside, before and after the phase required, the actual situation of the opening and closing totally stretch. Taichiquan is very rich in culture.

We analyze the formation process of Taichiquan from the following geographical areas in China; the main object of study of this article is Zhejiang Taichiquan enthusiasts or athletes. We make the analysis of the whole Taichiquan culture propagation [8] (Figs. 87.1, 87.2, 87.3 and 87.4).

From the end of the twentieth century to the beginning of twenty-first century, Zhejiang province of Taichiquan chuan culture through the great change,



Fig. 87.1 Location of Taichiquan culture establishment

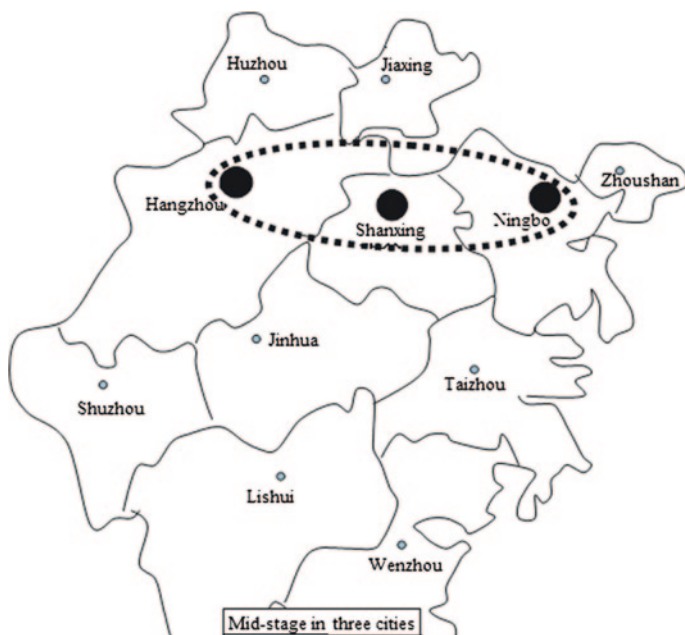


Fig. 87.2 Location of Taichiquan maturity periods

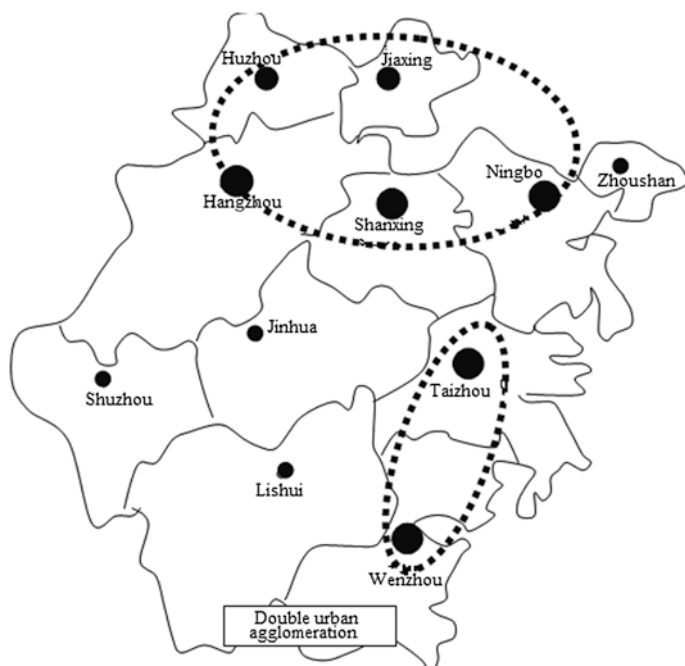


Fig. 87.3 Locations of Taichiquan culture prosperity period

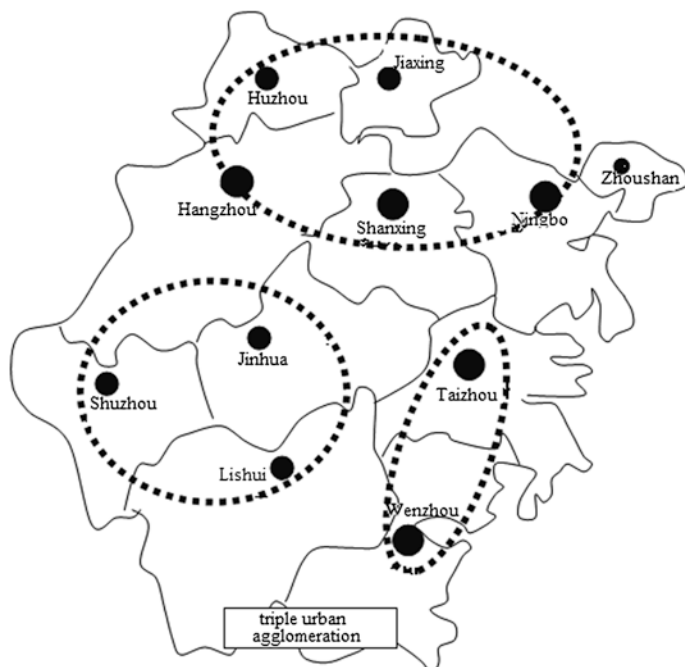


Fig. 87.4 Locations of Taichiquan culture diversification

according to not complete count, Zhejiang province of Taichiquan chuan activists, including enthusiasts and athletes, a total of 62,000 people, 9.35 % of the population, among them, Hangzhou’s most Taichiquan fans, followed by Ningbo [9]. Gradually, the state, and the Shaoxing, Jiaxing, Taizhou this three also have become have Taichiquan fans of big cities.

The author in Zhejiang province from the formation of the culture of the Taichiquan as an example, through the analysis and research, summed up the formation mechanism of the Taichiquan culture, as is shown in the figure below (Fig. 87.5).

From the graph, we can find that the formation of the culture of Taichiquan not only with personal factors and social factors. And the same situation factors can also restrict the development of the Taichiquan culture.

87.3 Taichiquan Culture Formation Mechanism Space Panel Measurement Analysis

First is the choice of variables. This article uses Taichiquan culture entropy coefficient LQ judge the sport gathered Taichiquan degree (SERV). We use the formula $LQ = (E_{ij}/E_i)/(E_{kj}/E_k)$ and then work out Taichiquan culture entropy coefficient, the higher the value, the sport of Taichiquan gathered the higher level; conversely, the value of the smaller, Taichiquan chuan the sport gathered the less degree.

Next is the Taichiquan culture space panel measurement analysis [10]:

Individual $I = 1, 2 \text{ set}, \dots, N, N = 15$; Time $t = 1, 2, \dots, T, T = 5$; And then the space weight matrix $Y = \{y_1, y_2, y_3, \dots, y_m\}$ resolve for diagonal matrix, next is the measuring model [11]:

$$y = p(I_T * W_N)y + X\beta + \varepsilon \tag{87.1}$$

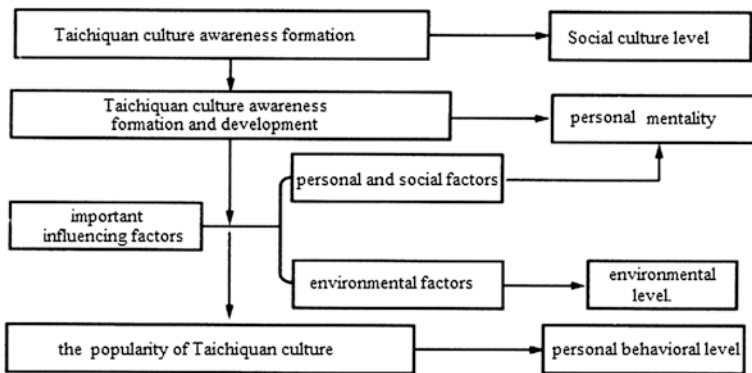


Fig. 87.5 Taichiquan culture formation mechanism

$$y' = X\beta + \varepsilon \tag{87.2}$$

$$\varepsilon = \lambda(I_T * W_N)\alpha + \mu \tag{87.3}$$

$$y'' = p(I_T * W_N)y + X\beta + \varepsilon + \delta + \nu \tag{87.4}$$

This paper uses samples of the 15 cities of Zhejiang province, with the time from 2007 to 2011, a total of five years. By using the above formula, we put each parameter into formula, and the data statistics are as follows: (Tables 87.1, 87.2, 87.3).

From the above chart of the results, we can see that our country of Taichiquan culture development has obvious space correlation, and displays a strong continuity and performance to the time dimension and the spatial dimension significantly.

Table 87.1 Moran I exponent value of the Taichiquan culture of 15 cities in Zhejiang

Years	Moran I	Moran I expectations	Standard deviation	Normal statistics	Probability p value
2007	0.256	-0.035	0.108	2.703	0.005
2008	0.249	-0.028	0.112	2.629	0.015
2009	0.231	-0.030	0.114	2.405	0.025
2010	0.215	-0.024	0.107	2.576	0.015
2011	0.210	-0.029	0.116	2.129	0.020

Table 87.2 Correlation inspection

Method of inspection	Sample	Check value	Critical value	Probability value
LMerror	308	21.75	17.547	0
LMsar	308	24.35	7.548	0
Lratios	308	54.68	6.635	0
Moran	308	5.79	1.967	0
Walds	308	1047.95	6.635	0

Table 87.3 Taichiquan culture weight matrix data table

Model	Variable	Non-fixed effect	Fixed effect	Time effect	Space effect
Space panel data model	Constant	4.292	0	0	0
	LnTFP	0.441	-0.347	0.441	-0.135
	LnCOST	1.032	0.124	0.878	-0.366
	LnSCALE	-0.552	0.152	0.487	0.060
	LnKNO	0.165	0.242	0.157	0.054
	LnGOV	0.575	0.922	0.175	0.213
	Rbar	0.514	0.912	0.546	0.278
	Sigma^2	0.102	0.019	0.111	0.882
	Log	-85.54	173.67	102.52	100.94

87.4 Conclusion

Taichiquan is a sport that has obvious quality effect on the human body. It has the function of health care. This paper made an analysis of the measurement again, from which we can draw at present the Taichiquan culture development speed. Therefore, our country's Taichiquan culture forming process is reasonable and healthy, and we want to make persistent efforts, continue to spread Taichiquan culture to make the world feel Taichiquan is a sport that can bring people happiness.

References

1. Zhang Z (2005) Taichiquan leisure concept and the Olympic spirit fusion. *J Wuhan Inst Phys Edu* 6:43–46
2. Gao Y (2010) Concerning the philosophical foundation of Taichiquan reason. *J Tianjin Sports Inst* 3:56–57
3. Ding Z (2010) China philosophy history course, vol 10. East China normal University Press, pp 31–33
4. Cui J (2009) “Lao Zi” to the Chinese tradition martial arts influences. *Martial Sci* 3:76–77
5. Zhou W (2010) The Chinese traditional sports advanced tutorial introduction, vol 09. China High Education Press, Beijing, pp 572–578
6. Ni Y (2005) Concerning the Chinese traditional sports, vol 05. Beijing sport University Press, Beijing, pp 97–99
7. Zhang H (2006) Anaesthetic grand view, vol 12. People's publishing house, Delhi, pp 57–58
8. Chen X (2008) Depiction of Taichiquan, vol 2 Shanxi Science and Technology Publishing House, Taiyuan, pp 65–67
9. Gu L (2007) Taichiquan research, vol 4. People's sports press, Owatonna, pp 32–34
10. Ma Z (2010) Discuss the cultural difference impact on intercultural communication. *Sci Technol Innov Herald* 10:53–56
11. Zhang H (2009) Taichiquan culture-come to Taichiquan 6:11–14