

Analysis of the Main Factors Affecting the Development of Fitness and Bodybuilding during a Pandemic: The Case of Leshan City

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Abstract: In the context of the new crown epidemic, Leshan City, Sichuan Province, analyzed the factors affecting fitness and bodybuilding sports in the region through literature analysis, questionnaires and mathematical statistics. The results showed that there are several factors affecting the development of fitness and bodybuilding sports, including direct factors such as insufficient facilities and coaches' level, and environmental factors such as lack of government publicity and support. After the analysis, the basic situation of the development of fitness and bodybuilding sports in Leshan City under the new crown epidemic at this stage was studied, and the problems existing at this stage were proposed, don't give relevant suggestions. To improve the development of fitness and bodybuilding sports in Leshan City, Sichuan Province, and promote the development of fitness and bodybuilding sports in China.

Keywords: Leshan City; Fitness and Bodybuilding Sports; Development Status; Countermeasures and Suggestions

1. Introduction

1.1. Research Background and Motivation

During the pandemic, the fitness industry has suffered a very heavy blow (Chen Z 2020). In response to national policies, people try to reduce travel time and frequency as much as possible and go to the gym for training is rare, which seriously affects the development of the fitness industry. All crowded places face the problem of poor air mobility, and gyms also face such problems. (Hanbo 2014) From the perspective of self-protection, the willingness and frequency of members to go out for fitness will also be greatly reduced [1].

Because of this, it is quite necessary to promote fitness in such a special period. Therefore, this paper studies the development status, existing problems and related factors of fitness and bodybuilding in Leshan City in recent years, combined with the many disturbances of the new crown epidemic to the sports industry and proposes countermeasures according to the characteristics of the situation reflected by the current situation and bodybuilding in Leshan City, and offer solutions to further develop the fitness and bodybuilding movement in Leshan City.

1.2. Purpose of the Study

Based on the above research background and motivation, this paper has the following research objectives:

- (1) Under the background of the new crown epidemic, study the basic status of fitness and bodybuilding activities in Leshan City.
- (2) Explore how fitness and bodybuilding in Leshan can overcome the difficulties of the new crown epidemic and develop faster, better and at a higher level.
- (3) Targeted results and countermeasures are obtained through analysis to provide theoretical support and reference for the faster development of fitness and bodybuilding.

1.3. Research Process

First of all, determine the research topic and purpose. Then, according to the research topic, the relevant literature is discussed, the relevant framework and assumptions are determined and the framework and questionnaire content of this research are proposed. Next, the pre-test questionnaires are distributed and the insignificant items are modified and deleted, and then the formal questionnaires are distributed. Finally, recover questionnaires, analyze and organize surprise data, and write combination and suggestions based on analysis results [2].

2. Review of the Literature

2.1. Fitness and Bodybuilding Exercises

Bodybuilding was officially born in China in the 1930s and bodybuilding has become an Asian Games event as early as the Busan Asian Games and the Doha Asian Games (Liokaftos D 2019). The men's fitness and bodybuilding project was officially established in Ecuador on November 1, 2012. This is the first time that the men's fitness and bodybuilding competition has entered the stage of history. (Zhang Ming 2015)

Although foreign fitness sports are earlier than domestic ones, after all, China, the country with the largest population, is the place with the most market and development prospects for this sport. Most foreign studies are conducted from the perspectives of nutritional supplements, training methods, measurement and evaluation, etc., but as a special study on the project of "Men's Fitness and Bodybuilding", it has not yet been consulted. This phenomenon is mainly related to the lack of independence of the project, which is always covered in bodybuilding. (Zhang Zihan 2021) Without a separate study, the current situation of the project is still not optimistic, which is directly related.

2.2. The Impact of the New Crown Epidemic on the Development of the Sports Industry and Fitness and Bodybuilding

In his "Analysis of the Impact of the Epidemic Fitness and Bodybuilding Event Model", Xu Zishun concluded that the epidemic has caused a huge blow to the fitness and bodybuilding industry, which has had a strong impact on the main body of its development - fitness and bodybuilding events, which directly led to stagnation and delay. At the same time, as the main body of fitness and bodybuilding events, people are also the carriers of fitness and bodybuilding (Newmire 2020). The "online" fitness and bodybuilding competition mode is undoubtedly a highlight in the history of fitness and bodybuilding [3]. (Li Liqiang 2021) It also provides people with new thinking about fitness and bodybuilding events and provides new ideas and perspectives for people to think about the direction and method of fitness and bodybuilding communication and development.

2.3. Factors Affecting the Development and Promotion of Fitness and Bodybuilding

The main influencing factors mentioned by Zhang Shu and Wei Zhang Jinsong in "Research on the Influencing Factors and Development Countermeasures of College Sports Resources Serving National Fitness" are conceptual factors, venue factors, safety factors, and information factors. And it is concluded that colleges and universities should give full play to their advantages and take responsibility in the implementation of the national fitness strategy for the whole people.

By summarizing (1) sports values are the main factor affecting the consumption of sports entertainment in our country. (2) Leisure time is a necessary factor affecting the consumption of sports, fitness and entertainment. The amount of leisure time and the way of domination affect residents' participation in sports and entertainment consumption. (3) The level of economic income is an important factor affecting the consumption of fitness and entertainment.

3. Research Methodology

3.1. Research Framework

This study is to explore the factors that affect the willingness of the public to participate in fitness and bodybuilding in Leshan. These factors affect the development of fitness and bodybuilding in

Leshan City. The factors that affect fitness and bodybuilding are divided into fitness and bodybuilding hardware factors, policy factors, and fitness and bodybuilding software factors. Analysis, the sampling object is the public in Leshan area [4].

3.2. Research Hypotheses

Based on the above literature review, this study makes the following six research hypotheses:

H1: The influence of equipment and facilities of Leshan fitness clubs on public awareness of fitness and bodybuilding in Leshan.

H2: The influence of equipment and facilities of Leshan fitness clubs on the willingness of the public to participate in fitness and bodybuilding in Leshan.

H3: The influence of the support of the Leshan municipal government on the awareness of public participation in fitness and bodybuilding in Leshan.

H4: The influence of the publicity of fitness and bodybuilding events on the awareness of public participation in fitness and bodybuilding in Leshan City.

H5: The influence of the level of trainers in Leshan fitness clubs on the awareness of public participation in fitness and bodybuilding in Leshan.

H6: The influence of the level of trainers in Leshan fitness clubs on the willingness of the public to participate in fitness and bodybuilding in Leshan.

3.3. Questionnaire Design

3.3.1. Questionnaire Design

We plan to investigate the relationship between the six variables of facilities and equipment, coaching level, event publicity, government support, participation awareness, and participation through questionnaires. But further analysis, we can find that the facilities, equipment and the level of coaches belong to the hardware conditions of bodybuilding, and the publicity of events and government support belong to the environmental conditions of bodybuilding. Therefore, we constructed two latent variables of hardware conditions and environmental conditions [5].

4. Data Analysis

4.1. Descriptive Demographic Analysis

Table 1: Questionnaire Survey of Infrastructure Statistics Data

		Frequency	Percentage	Effective percentage	Cumulative percentage
Gender	Male	94	43.1	43.1	43.1
	Female	124	56.9	56.9	100
Movement frequency	1 time or less	62	28.4	28.4	28.4
	2- 3 times	65	29.8	29.8	58.3
	4 - 5 times	67	30.7	30.7	89
	6 times and above	24	11	11	100
Grade	Freshman year	50	22.9	22.9	22.9
	Sophomore year	68	31.2	31.2	54.1
	Junior year	87	39.9	39.9	94
	Senior year	13	6	6	100
Ethnicity	Ethnic Minorities	28	12.8	12.8	12.8
	Ethnic Han	190	87.2	87.2	100
Whether to participate in sports groups	Participate	203	93.1	93.1	93.1
	None	15	6.9	6.9	100

4.1.1. Gender

From the above Table 1, we can find that among the 400 samples, there are 196 male respondents, accounting for 49% of the total, and 204 female respondents, accounting for 51% of the total. Women is slightly more than men.

4.1.2. Frequency of Exercise Per Week

From the above Table 1, we can find that among the 400 surveyed, 103 people exercise once or less once a week, accounting for 26.5% of the total; 95 people exercise 2-3 times a week, accounting for 26.5% of the total. 23.8%; 106 people exercise 4 to 5 times a week, accounting for 26.5% of the total; 96 people exercise 6 or more times a week, accounting for 24% of the total; relatively speaking, the distribution is relatively even [6].

4.1.3. Age

From the above Table 1, we can find that among the 400 samples, there are 132 respondents aged 18-25, accounting for 33.0% of the total; 130 respondents aged 26-30, accounting for 32.5% of the total; 31 - 117 respondents were 39 years old, accounting for 29.3% of the total; 21 respondents were over 40 years old, accounting for 5.3% of the total. The respondents in this survey tend to be younger, except for the 40-year-old respondents in addition to fewer respondents, the number of other age groups is basically balanced.

4.1.4. Level of Knowledge of the Sport of Bodybuilding Competition

From the above Table 1, we can find that among the 400 samples, 246 people know about bodybuilding competition, accounting for 61.5% of the total, and 188 people do not know much about bodybuilding, accounting for 47.0% of the total. More than half of them still have some understanding of bodybuilding competition.

4.1.5. Participation in Sports Groups or Not

From the above Table 1, we can find that among the 400 samples, 127 people have participated in relevant sports groups, accounting for 31.8% of the total, and 273 people have not participated in relevant sports groups, accounting for 68.3% of the total.

4.1.6. Self-Initiated Fitness/Bodybuilding Experience

From the above Table 1, we can find that 246 of the 400 samples had fitness-related experience, accounting for 61.5% of the total, and 154 people did not know much about bodybuilding, accounting for 38.5% of the total. More than half of the respondents had self-initiated fitness/bodybuilding experience [7].

4.2. Descriptive Statistics of the Main Issues

In the survey of the hardware conditions of fitness sports, we surveyed the two dimensions of atmosphere, facilities and equipment and the level of coaches; for facilities and equipment, the overall distribution range is 1-5 points, and the mean is around 3.0, of which the fourth The average value of each item is 3.11; for the coaching level dimension, the overall distribution range is 1-5 points, and the average value is around 3.0, of which the third item has the highest average value of 3.075.

In the survey of the environmental conditions of fitness sports, we surveyed the two dimensions of the atmosphere of the event publicity and the government support; for the event publicity, the overall distribution range is 1-5 points, and the average is around 3.0. Among them, the first item has the highest average value of 3.04; for government support, the overall distribution range is 1-5 points, and the average value is around 3.0, of which the fifth item has the highest average value of 3.075.

4.3. Confirmatory Factor Analysis

4.3.1. Second-Order Confirmatory Factor Analysis of Direct Factors and Environmental Factors

Table 2: Model fit indices

	Model	Acceptable Values
χ^2	424.20	
p value	<.001	.05 ≤ p ≤ 1.00 (Hoyle, 1995)
χ^2/df	1.61	<3 (Kline, 2005)
Goodness of Fit Index (GFI)	.88	≥.90 (Hair, Tatham, Anderson, & Black, 2006)
Adjusted Goodness of Fit Index (AGFI)	.85	≥.80 (Marsh, Balla, & McDonald, 1988)
Standardized Root Mean Square Residual (SRMR)	.05	≤.10 (Kline, 2005)
Root Mean Square Residuals (RMR)	.04	<.05 (McDonald & Moon-Ho, 2002)
Root Mean Square Error of Approximation (RMSEA)	.05	<.08 (Hair et al., 2006)
Normed Fit Index (NFI)	.89	≥.90 (Hair et al., 2006)
Non-Normed Fit Index (NNFI; Tucker-Lewis index)	.95	≥.90 (Bentler & Bonett, 1980)
Comparative Fit Index (CFI)	.95	≥.90 (Bentler, 1990)
Incremental Fit Index (IFI)	.95	≥.90 (Bollen, 1989)

For the validity test of direct factors and environmental factors, we used the results of confirmatory factor analysis, since we included two latent variables "direct factor" and "environmental factor" from the original questionnaire, and the difference between these two latent variables There may be a certain relationship, so we used second-order confirmatory factor analysis to verify the validity of the questionnaire. Confirmatory factor analysis is often measured from two perspectives: one is the overall fitting index of the confirmatory factor analysis model, and the other is the path coefficient index of the confirmatory factor analysis model.

The dimensional measures are summarised in the table above (Table 2) and analysed.

Table 3: The standard reference value data

	Second order model results	Standard Reference Value	
Chi-Square	261.221***	Significant is sufficient	Attainment of standards
Chi-Square/df	1.58	Less than 3	Attainment of standards
RMSEA	0.038	Approaching 0.15	Attainment of standards
CFI	0.961	> 0.9	Attainment of standards
TLI	0.959	> 0.9	Attainment of standards
SRMR	0.024	<0.08	Attainment of standards

	Estimate	S.E.	C.R.	P-Value
Facilities and equipment	BY			
A1	0.925	0.008	109.036	0.000
A2	0.916	0.009	99.551	0.000
A3	0.825	0.017	48.538	0.000
A4	0.916	0.009	99.378	0.000
A5	0.921	0.009	105.013	0.000
Level of coaching staff	BY			
B1	0.917	0.009	102.328	0.000
B2	0.868	0.013	65.496	0.000
B3	0.922	0.009	108.085	0.000
B4	0.930	0.008	119.227	0.000
B5	0.927	0.008	114.475	0.000
Tournament promotion efforts	BY			
C1	0.893	0.011	79.551	0.000
C2	0.918	0.009	101.175	0.000
C3	0.918	0.009	101.442	0.000
C4	0.921	0.009	103.904	0.000
C5	0.908	0.010	90.717	0.000
Government support	BY			
D1	0.909	0.010	90.943	0.000
D2	0.894	0.011	78.645	0.000
D3	0.874	0.013	66.795	0.000
D4	0.924	0.009	105.959	0.000
D5	0.914	0.010	94.912	0.000
Hardware	BY			
Facilities and equipment	0.929	0.015	62.897	0.000
Level of coaching staff	0.982	0.013	73.168	0.000
Environmental conditions	BY			
Tournament promotion efforts	0.919	0.018	50.352	0.000
Government support	0.904	0.019	48.091	0.000
Environmental conditions	WITH			
Hardware	0.761	0.026	28.738	0.000

In the Table 3: a1-a5 are the 5 items included under the facilities and equipment dimension, b1-b5 are the 5 items included under the coaching level dimension; c1-c5 are the 5 items included under the event publicity dimension, d1-d5 are the 5 items included under the government support dimension; e1-e6 are the 6 items included under the participation awareness dimension; f1-f6 are the 6 items included under the participation dimension [8].

4.3.2. Analysis of Participatory Awareness Validation Factors

Table 4: An analysis based on the criteria in Table 3 gives

	Participation Awareness Model Results	Standard Reference Value	
Chi-Square	14.504***	Significant is sufficient	Attainment of standards
Chi-Square/df	1.61	Less than 3	Attainment of standards
RMSEA	0.039	Approaching 0.15	Attainment of standards
CFI	0.968	> 0.9	Attainment of standards
TLI	0.967	> 0.9	Attainment of standards
SRMR	0.014	<0.08	Attainment of standards

	Estimate	S.E.	Est./S.E.	P-Value	
	M	BY			
	E1	0.944	0.006	153.393	0.000
	E2	0.944	0.006	151.826	0.000
	E3	0.934	0.007	131.301	0.000
	E4	0.936	0.007	135.185	0.000
	E5	0.925	0.008	117.805	0.000
	E6	0.948	0.006	164.124	0.000

As can be seen from the Table 4 above, in the validated factor analysis model for awareness of participation.

The standardized factor loadings for involvement awareness and E1 were 0.944, with a standard error of 0.006 and a C.R. value of 153.393, reaching a significance level ($p < 0.001$). The standardized factor loadings for involvement awareness and E2 were 0.944, with a standard error of 0.006 and a C.R. value of 151.826, which reached the significance level ($p < 0.001$). The standardized factor loadings for involvement awareness and E3 were 0.934, with a standard error of 0.007 and a C.R. value of 131.301, which reached the significance level ($p < 0.001$). The standardized factor loadings for involvement awareness and E4 were 0.936, with a standard error of 0.007 and a C.R. value of 135.185, which reached the significance level ($p < 0.001$). The standardized factor loadings for involvement awareness and E5 were 0.925, with a standard error of 0.008 and a C.R. value of 117.805, which reached the significance level ($p < 0.001$). The standardized factor loadings for engagement awareness and E6 were 0.948, with a standard error of 0.006 and a C.R. value of 164.124, which reached the significance level ($p < 0.001$).

4.3.3. Analysis of Participatory Validity Factor

Table 5: Analysis Data of Participatory Validity Factor

	Engagement model results	Standard Reference Value	
Chi-Square	12.807***	Significant is sufficient	Attainment of standards
Chi-Square/df	1.423	Less than 3	Attainment of standards
RMSEA	0.033	Approaching 0.15	Attainment of standards
CFI	0.969	>0.9	Attainment of standards
TLI	0.968	>0.9	Attainment of standards
SRMR	0.015	<0.08	Attainment of standards

	Estimate	S.E.	Est./S.E.	P-Value	
	Y	BY			
	F1	0.912	0.009	98.656	0.000
	F2	0.910	0.009	97.202	0.000
	F3	0.925	0.008	115.727	0.000
	F4	0.904	0.010	90.967	0.000
	F5	0.951	0.006	166.903	0.000
	F6	0.948	0.006	158.727	0.000

The normalized factor loadings of participation and F1 were 0.912, the standard error was 0.009, and the CR value was 98.656, which reached the level of significance ($p < 0.001$). The normalized factor loadings of participation and F2 were 0.910, and the standard error was 0.009, and the CR value was 97.202, reaching the level of significance ($p < 0.001$). The normalized factor loading of participation and F3 was 0.925, the standard error was 0.008, and the CR value was 115.727, which reached the level of significance ($p < 0.001$). Participation and F4 The normalized factor loading for participation and F5 was 0.904, the standard error was 0.010, and the CR value was 90.967, which

reached the significance level ($p < 0.001$). The significance level was reached ($p < 0.001$). The normalized factor loading of participation and F6 was 0.948, the standard error was 0.006, and the CR value was 158.727, which reached the significance level ($p < 0.001$).

4.4. Confidence Analysis

Reliability refers to the consistency or stability of the measurement results, that is, the degree to which the results obtained by researchers using different measurements of the same or similar phenomenon (or group) are consistent. This paper uses SPSS26.0 software to test the reliability and validity of the sample data. The reliability analysis refers to Cronbach's alpha coefficient, which is greater than 0.60, which means the data is reliable. It can be seen from the table below that the Cronbach's alpha coefficient of each latent variable of the questionnaire used in this study and the overall sample data are all greater than 0.60, and the reliability index of the questionnaire is reliable. able to meet the standard.

Table 6: Confidence analysis data

	Alpha factor	Number of items
Hardware condition dimension	0.943	5
Facilities and equipment	0.925	5
Level of coaching staff	0.931	10
Environmental conditions dimension	0.931	5
Government Support	0.926	5
Tournament publicity power	0.937	10
Awareness of participation	0.948	6
Participation	0.943	6

4.5. Structural Equation Modelling

In the research on the four aspects of facilities and equipment, the level of coaches, the strength of event publicity, and the strength of government support, we found that these four variables are different and related to each other. In the research on other similar industries (such as: taekwondo), some scholars have combined these two aspects for research (Sun Maojie, 2021), so in this research, we will connect the facilities and the level of the coaches and then on top of it. And so far, (2021), Leshan City has continued to carry out a series of small bodybuilding and fitness activities. Compared with other regions, the influence of events in Leshan is significantly higher, so the indirect impact of publicity on bodybuilding and fitness events on the industry is also important. In addition, Sun Xiaoni et al. (2021) found in their research on the comprehensive fitness platform of higher sports and vocational colleges that in addition to publicity, another important factor—government support and publicity of related activities together constitute the local fitness platform environmental factors.

Table 7: The structural equation modelling results data

	Structural equation modelling results	Standard Reference Value	
Chi-Square	875.964***	Significant is sufficient	Attainment of standards
Chi-Square/df	1.925	Less than 3	Attainment of standards
RMSEA	0.048	Approaching 0.15	Attainment of standards
CFI	0.967	>0.9	Attainment of standards
TLI	0.965	>0.9	Attainment of standards
SRMR	0.287	<0.08	Not met

First of all, we need to evaluate the model as a whole. The overall fitting indicators of the model are as above. The results show that the fitting indicators of the structural equation model basically meet the standard reference. This shows that the model has basically passed the test. Therefore, we can further verify our hypothesis by testing the paths of the model. The coefficients of the specific paths and their significance are shown in the following table.

4.6. Research Testing

Based on the results of the above analysis, this study makes the following six research hypotheses as follows:

H1: Leshan fitness club venues and facilities have a positive impact on the public awareness of fitness and bodybuilding in Leshan.

H2: Leshan fitness club venues and facilities have a positive impact on the willingness of the public to participate in fitness and bodybuilding in Leshan.

H3: The support of the Leshan municipal government has a positive impact on the public awareness of fitness and bodybuilding in Leshan.

H4: The publicity of fitness and bodybuilding events has a positive impact on the public awareness of fitness and bodybuilding in Leshan City.

H5: The level of trainers in Leshan fitness clubs has a positive impact on the awareness of public participation in fitness and bodybuilding in Leshan.

H6: The level of trainers in Leshan fitness clubs has a positive impact on the willingness of the public to participate in fitness and bodybuilding in Leshan.

5. Conclusions

(1) Based on the results of the descriptive statistics we can find that:

Among the 400 samples, 246 people knew about bodybuilding competition, accounting for 61.5% of the total, and 188 people did not know much about bodybuilding, accounting for 47.0% of the total. More than half of them still have some understanding of bodybuilding competition. This shows that Leshan City, as an important industrial city in Sichuan Province and a central city in the southern part of Chengdu, has a certain foundation of bodybuilding and fitness activities for the local people due to its open cultural atmosphere and related competitions. It is greatly beneficial to carry out the further construction of related content. In addition, 246 people had fitness-related experience from the 400 samples, accounting for 61.5% of the total, and 154 people did not know much about bodybuilding, accounting for 38.5% of the total. More than half of the respondents have had experience in fitness/bodybuilding on their own, which also confirms the strong local mass base of bodybuilding competitions. This also shows that the fitness industry has suffered a very heavy blow even during the epidemic. In response to national policies, people are trying to reduce travel time and frequency as much as possible. Under the background of normalization of new crown epidemic prevention and control, the bodybuilding and fitness industry has recovered. There are also some basics.

(2) According to the results of the structural equation model, we can find that the four assumptions proposed earlier reflect different information:

① H1: The hardware conditions of Leshan fitness club venues and facilities and the level of coaches have a positive impact on the public awareness of fitness and bodybuilding participation in Leshan City. (founded)

② H2: Environmental conditions such as publicity and government support for bodybuilding and fitness sports events in Leshan City have a positive impact on the awareness of public participation in fitness and fitness sports in Leshan City. (founded)

③ H3: The hardware conditions of Leshan fitness club venues and facilities and the level of trainers have a positive impact on the participation of the public in fitness and bodybuilding in Leshan. (founded)

④ H4: Environmental conditions such as publicity and government support for bodybuilding and fitness events in Leshan have a positive impact on the participation of the public in fitness and bodybuilding in Leshan. (founded)

(3) According to the above content, corresponding suggestions can be made:

From the perspective of the government, in addition to increasing investment and other "hard power", the improvement of various "soft power" is the focus of promoting bodybuilding and fitness. Among them, improving the level of coaches is an aspect that cannot be ignored. In this study, it is found that the level of coaches has a positive effect on the improvement of individual participation awareness and participation.

In order to prevent and control the new crown epidemic, the development model and methods of sports have also undergone significant changes, and one of the most notable features is the surge in the demand for "cloud". Due to restrictions on going out, various sports organizations should also innovate

their ideas when launching mass sports events. For example, mobile Internet technology can be used as a strong support, and companies such as technology and network information can organize online bodybuilding and fitness activities to break the traditional concept of offline bodybuilding and fitness.

In addition, the government should deepen the side structural reform of the mass supply of bodybuilding and fitness. The imbalance and insufficient development between sports demand and supply is the main contradiction facing the mass sports work in our country, and the key to solving this contradiction is It is to improve the quality and efficiency of its supply level. To do this, you must first understand people's home exercise needs during the special period of the epidemic. In this area, you can collect and count information through technologies such as the Internet and big data combined with the public opinion expression mechanism. During the epidemic, the long-term stay at home has made people have higher requirements for the methods and means of scene-based bodybuilding and fitness exercises. The government should also provide more accurate and efficient services for fitness groups; it must also actively coordinate various social resources, further optimize the allocation of national fitness resources, properly handle the relationship between the government, the market and the society, and strive to form a new pattern of national fitness development with multiple participation.

References

- [1] Chen, Z. (2020). "Study on The Role of Fitness and Bodybuilding in Promoting the Physical Health of College Students in China %J *International Journal of Education and Economics*."
- [2] Liokaftos, D. (2019). "Natural bodybuilding: An account of its emergence and development as competition sport %J *International Review for the Sociology of Sport*."
- [3] Newmire, D. E. and D. S. Willoughby (2020). "Partial Range of Motion Resistance Training: A Feasible Bodybuilding Training Regimen for Local or Regional Muscle Hypertrophy? %J *Strength and Conditioning Journal*."
- [4] Gao, Yuan (2012). "Competition in the market of well-known fitness clubs in Leshan %J *Mall Modernization*." (02): 27-28.
- [5] Han, Bo (2014). *Research on the current situation and countermeasures of outdoor fitness and mountaineering sports for college students in Beijing*, Capital Institute of Sports.
- [6] Li, L. Q. (2021). *Research on the current situation and development path of fitness clubs in Xinfu District, Xinzhou City. The Third Academic Exchange Conference of "National Fitness and Scientific Exercise"*, Nanchang, Jiangxi, China.
- [7] Zhang, M. (2015). *Research on the current situation and countermeasures of fitness and bodybuilding in Beijing universities*, Beijing University of Sports.
- [8] Zhang Zhan (2021). "Study on the Current Situation of Commercial Gym Development in Daqing City %J *Business Culture*." (29): 100-101.