

Factors Influencing Young People's Fitness Consumption under the COVID-19

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Abstract

Fitness has become one of the most popular projects of many people in modern times, and people are willing to spend time and money on fitness. Physical fitness can not only develop good living habits it can also be used as an active leisure way to enrich entertainment and cultural activities. This article takes college student behavior as the object to carry out research on promoting the development of fitness economy. College students are the mainstay and important consumer group in the society, and it is of great significance to study their fitness consumption status and attitudes. Smart-PLS 3.0 is used as the main statistics analyzing tool. The results indicate that self-demand, social influence, facilitating conditions, performance expectancy and effort expectancy are drivers for young people to adopt fitness.

Keywords: Fitness; Young people; Self demand; Social influence.

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1. INTRODUCTION

Under the epidemic situation, many people stay at home for a long time, lack of daily exercise, and are easily tempted by delicious food at home, so the accumulation of fat gets faster. Therefore, many people are looking for fitness and the proportion of sports fitness consumption is gradually increasing. The fitness industry has gradually become a potential player to drive economic growth. Young people's positive attitude towards life makes them become the main consumption group of sports fitness [1, 2]. However, with the development of modern information media and game entertainment, some young people are more willing to take part in other community practice activities or online games instead of physical exercise, so they are probably not willing to spend time and energy on physical fitness.

Li [4] studies the psychological characteristics of college students' sports consumption and the factors influencing their consumption behavior, analyzed the situation of College Students' sports consumption from the psychological point of view, and concluded that college students are in a more rational state in sports consumption. Chen & Wang [3] point out that at present, college students' physical fitness only accounts for 17.62% of all students, and male consumers are the main ones, and there are seven main factors affecting

college students' fitness consumption. Wang [5] implies that college students' sports fitness consumption intention is affected by five variables: product factor, information and group factor, external factor, demand and consumption evaluation. Fan [6] gives the main factors of college students' tennis consumption behavior are the level of monthly living expenses, personal living habits, students' heavy academic burden, personal sports values and other factors. It is suggested that the relevant school leaders should pay more attention to tennis, set up seminars on campus, strengthen college students' understanding of tennis, and improve college students' cognitive level of sports. Yin & Wang [7] carry on the investigation of some college students to understand the current situation and problems of college students' weight management consumption, as well as the influencing factors of their weight management consumption behavior, in view of the current situation and influencing factors of their weight management consumption [8], put forward to cultivate their consumption habits, establish the concept of weight management consumption.

Based on the current researches, it is easy to find that most research factors are about the psychological factors, external social factors, family, recognition of sports fitness value and other aspects, and most of them ignore the college students' own

consumption preferences, and also lack of emphasis on the importance of promoting fitness economy in the college students' market by investigating the influencing factors of fitness consumption [9]. Therefore, it is necessary to understand the consumption behavior and attitudes of college students from many aspects, including studying the consumption behavior of college students from their current consumption cognition and consumption structure [10], so as to derive the influence of these factors on fitness consumption. Find out the main factors that may affect college students' fitness consumption behavior through social observation and exploration, and conduct data analysis to explore the impact of these factors, and finally make some summary suggestions, which can guide college students to receive better fitness consumption and promote the fitness development.

Wu believes that the fitness economy is based on production and operation [11], organically integrating the public's fitness behavior with the economy, and forming an industry for development. Not only has it grown a number of sports and fitness brands but many cities have also used their geographical or economic advantages to vigorously develop the sports and fitness industry, and make great contributions to the development of the fitness economy. Zhu believes that as a blue ocean industry, sports fitness is booming, and its status in the economic field is constantly improving, playing an important role in the process of promoting economic and social development [12]. The development of the mass fitness economy can [13] revitalize the upstream and downstream markets of the fitness industry, expand employment, and increase economic growth. Therefore, it is necessary to actively explore the development path of the national fitness and sports industry, and formulate correct development strategies that conform to the reality.

2. HYPOTHESIS

To promote the development of the fitness economy in the consumer market for college students, it is necessary to study their fitness consumption behavior. Demand is the prerequisite of consumption. To study how a person consumes, we must first find what he needs; consumers and the consumer market are in a social environment, and changes in various conditions in the social environment will affect consumption decisions; economic conditions will affect young people's willingness to spend money on fitness; the time factor also affects young people's intention to exercise. If there is not enough time, or unwilling to spend the extra time on fitness, purchasing intention will decrease. Marketing is also an important driving factor because appropriate marketing strategy will encourage consumption [14]. A good environment and attitude will make customers happy, thereby promoting consumption.

Self-demand is the driving force of consumption. Only when there is demand can there be consumption. Young people are more concerned about their physical appearance, because a good appearance can increase their attractiveness to the opposite sex. At the same time, people who often participate in sports or who like to participate in group activities may have more opportunities to show your strength or figure to the outside world. Therefore, this article proposes that

H1: Self-demand positively affects fitness consumption intention.

With the advent of the consumer society and the rise of individualism [15], under the influence and promotion of structural factors such as the rapid development of the sports and leisure industries, and the efficient communication of media platforms, people's attention and investment in how to control and shape the body is increasing. Media promotion and demonstrations of fitness stars lead the trend of the times. Therefore, we propose that

H2: Social influence positively affects fitness consumption intention.

Although the price of a gym with fixed venues, complete fitness facilities and professional coaches is high, it makes people feel at ease [16]. Since the most difficult obstacles to overcome in fitness exercises are physical and mental fatigue and inertia, when personal mobility is lacking, professional fitness guidance and equipment that promote physical recovery will improve personal fitness efficiency. Therefore, we propose that

H3: Facilitating conditions positively affects fitness consumption intention.

Performance expectancy are similar to perceived usefulness, which refers to the degree to which young people improve their appearance through hard training, thereby bringing convenience and usefulness to their lives, studies, and work [17]. A better shape appearance can gain a clear advantage in job hunting, making friends, and other competitions. Therefore, we propose that

H4: Performance expectancy positively affects fitness consumption intention.

Effort expectancy refers to the ease of use perceived by young people for daily training and the services provided by the gym, similar to the perceived ease of use [18]. Consumers will judge whether the effort required to upgrade their appearance to a certain level is worthwhile or whether it is convenient for their daily life needs based on their own situation [19, 20]. And then, decide whether or not to continue to train, and then purchase behavior occurs. Therefore, we propose that

H5: Effort expectancy positively affects fitness consumption intention.

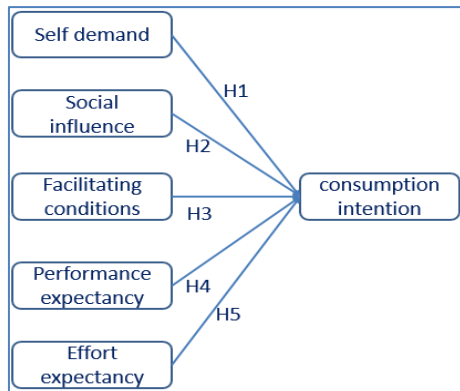


Fig-1: Research Model

3. METHOD OF RESEARCH

In order to improve the reliability and validity of the research, questionnaire surveys are distributed online in universities in different provinces of China. Those who participated in the questionnaire were first asked to read and sign a disclaimer. 1. I volunteered to participate in the questionnaire survey. 2. All questionnaire information can be made public. 3. I promise that there is no conflict of interest.

4. MEASUREMENT AND DATA ANALYSIS

Table 1 indicates that there are 272 volunteers in this survey. Almost half of them are women. 42.55% of their body mass indexes(BMI) are normal, and 40.43% are overweight. Over 60% of them spend less than 300\$ per month.

Table-1: Demographic Analysis

Category	Subject	N	%
Gender	Male	143	50.71%
	Female	129	49.29%
Body Mass Index (bmi)	Fat	23	8.16%
	Overweight	114	40.43%
	Normal	120	42.55%
	Below Normal	25	8.87%
Age	Below 20	15	5.32%
	[20,25)	83	29.43%
	[25,30)	154	54.61%
	Above 30	30	10.64%
Monthly expenditure \$	< 150\$	13	4.96%
	151-300\$	152	56.74%
	301-500\$	87	31.91%
	>501\$	20	6.38%

The reliability test values are listed in Table 2, where values of cronbachs-alpha and composite reliability are greater than 0.7[21], and value of AVE is

greater than 0.5 [22], therefore it proves the reliability of the model.

Table-2: Convergent Validity, Composite Reliabilities testing results

Construct	Cronbachs Alpha	Composite Reliability (CR)	AVE
Self-Demand	0.778	0.862	0.758
Social influence	0.726	0.801	0.573
Facilitating conditions	0.794	0.854	0.661
Performance expectancy	0.781	0.778	0.545
Effort expectancy	0.712	0.828	0.550
Consumption intention	0.735	0.835	0.558

Table 3 shows that the load of these projects is higher than that of other projects. These two steps prove the validity of the model [23] Therefore, all relevant

tests have proved the reliability and effectiveness of the model for structural model evaluation.

Table-3: Correlation Matrix and Square Roots of AVE

Construct	1	2	3	4	5	6
SD	0.902					
SI	0.341	0.871				
FC	0.452	0.331	0.883			
PE	0.416	0.241	0.285	0.858		
EE	0.298	0.419	0.231	0.052	0.796	
CI	0.322	0.411	0.121	0.362	0.23	0.917

Table 4 indicates that all of the five hypotheses are supported. The relationships between Self-demand and CI, social influence and CI, facilitating condition and CI are highly significant. Relationships between performance expectancy and CI, effort expectancy and CI are significant. This proves that young people are actively motivated by their self-demand and social situations to improve their body shape and health.

When they decide to select a nice fitness club, they will focus on its facilitating conditions as well as ease to use [24]. Most of the young people expect for a better health condition and nice body shape before they go to fitness club. And they can put a lot of effort into body shaping in order to achieve body shaping expectations [25].

Table-4: Hypotheses Testing Results

Hypotheses	Paths	Estimate	t-value
H1	Self-demand →consumption intention	0.322	4.532**
H2	Social influence →consumption intention	0.224	2.561**
H3	Facilitating conditions →consumption intention	0.148	4.465**
H4	Performance expectancy →consumption intention	0.122	2.108*
H5	Effort expectancy →consumption intention	0.118	2.217*

Figure 2 implies the path coefficients of the five hypotheses. Self-demand is proved to be the most important factor that influences young people's fitness consumption under the COVID-19. Social influence also plays a key role in the consumption intention process. Facilitating conditions, performance expectancy and effort expectancy are drivers for young people to adopt fitness.

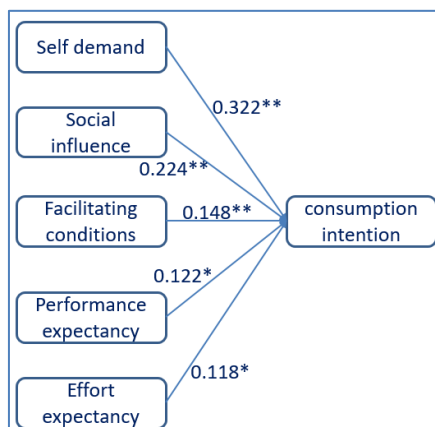


Fig-2: Structural Model (Note: *p<0.05; **p<0.01)

5. DISCUSSION

Most of the questionnaire participants' monthly expenditure are less than 300\$. More the 90% of questionnaire participants' monthly expenditure are less than 500\$. Therefore, Personal trainer, high-end fitness club are not their choice. Thus, Gyms should set up low-cost fitness programs for low-income young people to help young people form the habit of fitness. When their income increases, they will choose more advanced fitness courses. Since social influence is a significant factor, it is necessary for gyms to strengthen marketing. Free experience papers, fitness model shows, online lucky draw and other activities will help to expand the influence of the gym. It is important to have a warm bath and a comfortable training environment to recover from the tiring exercise so the service and hardware facilities of gymnasium should be improved to fulfill users' needs. When carrying out publicity, gyms can introduce the fitness equipment and functions, and provide free teaching for young people who have signed up to participate in fitness consumption, so that their consumers can feel the pleasure brought by fitness, have a good fitness experience, and have a good sense of identity with

fitness equipment, so as to improve the richness, fashion and quality of products and services and then enhance the attraction of the sports gym.

In the sports fitness industry, different strategies should be adopted for different groups [26]. Some consumers want to keep healthy, some consumers want to pursue a better body shape, and some others want to make friends. After grasping the characteristics of different needs, gyms should customize different services for different consumers according to different consumption purposes [27], so as to better meet their needs. In modern gymnasium design, the needs of consumers are various, such as drinking water, towel, washing after exercise, etc. At the same time, customers will also carry out word-of-mouth advertisement to publicize the customized service of the gym. The service of employees should be refined, pay attention to details, and accurately understand the inner needs of consumers [28]; Businesses need to maintain good customer communication and tracking service. For example, for some customers who tend to give up sports, gyms can track them on time, encourage them to exercise on time, suggest sports lunch, personal development plan, and provide consumers with more added values, so that consumers can feel a reasonable service.

Internet-plus mode has changed the economic form of fitness [29], new internet ways can bring fitness convenience to consumers at any time. The Internet-based gym not only changes the existing prepaid mode, but also improves mobility, intelligence, portability, social media, e-commerce and other functions. Young people can choose scattered spare time to fitness, increase the consumption of fitness accessories, so as to make fitness consumption more popular [30]. In the future, gyms can vigorously develop online fitness mode and upgrade it to make the development of fitness industry in line with the development trend of Internet.

6. CONCLUSION

From the global health trend, the global medical expenses are increasing, which affects human health in large part because of the unreasonable diet and less exercise and other lifestyle and habits. Influenced by the global novel coronavirus pneumonia, people pay more and more attention to their health. New fitness needs become a hot topic. Under the epidemic situation, health consumption is constantly upgrading and expanding, and the consumption of family health and network health has become a new trend. Short-term online physical fitness education and training and family sports fitness consumer goods are more popular. After the epidemic, sports fitness may present compensatory burst mode, and the gym and tourism leisure fitness industry will usher in better opportunities. When physical fitness becomes an indispensable part of people's life, people can expand the circle of friends and get physical and mental health

through physical fitness. At the same time, it can also test whether the economic development of a society has reached a certain level, reflecting the degree of social development.

REFERENCE

1. Wang. X. (2017). Postmodern analysis of College Students' sports consumption. *Sporting goods and technology*, 4.
2. Analysis of the economic effect and development prospects of China's fitness industry. (2019). *Abstract of pedagogy*; 12-23Z
3. Chen, W., Wang, M. (2015). Analysis on the influencing factors of College Students' fitness consumption preference. *Sporting goods and technology*, 18, 10-20
4. Li, L. (2009). On the psychological characteristics of College Students' sports consumption and the factors influencing their consumption behavior. *Business era*, 25; 34-34
5. Wang, X. (2019). Influencing factors of College Students' fitness consumption. *Guangxi quality supervision guide*, 3, 196-198
6. Shepard, W. (2015). *Ghost cities of China: The story of cities without people in the world's most populated country*. Zed Books Ltd..
7. Yin, Z. (2020). Wang Ling. Current situation and Countermeasures of College Students' weight management consumption behavior in Dalian. *Beifang economic and trade journal*, 10.
8. Gao, W. (2019). Research on the development of fitness economy in Wuling mountain area from the perspective of supply side reform. *Articles and technology for recreation and sports*, 20, 8-9
9. Huo, Y. (2018). The influence of national fitness on the development of sports economy. *New business weekly*, 11; 16
10. Zhong, Y. (2019). Research on the healthy development strategy of China's sports economy from the perspective of mass fitness economy. *Fujian tea*, 5; 53
11. Wu, J. (2016). Development model of fitness market from the perspective of sports economy. *Economist*, 12.
12. Zhu, H. (2018). Analysis of China's sports industry, national fitness and economic development. *Investment and entrepreneurship*, 7; 182-183
13. Chu, X. (2020). Research on sports consumption behavior and influencing factors of college students in Wuhu. *Journal of Shanghai Institute of physical education*.
14. Ma, Y. (2019). Investigation on College Students' physical exercise behavior under the background of healthy China. *Sports boutique*, 3, 15-18
15. Liao, Y., Yao, Y. (2019). Research on satisfaction of college students in gymnasiums around colleges and universities. *Modern commerce*, 7; 185-186
16. Liu, S., Ma, Y., Wang, J. (2019). Influencing factors and Countermeasures of brand development of Xi'an sports fitness club. *Summary of theses of*

- the 11th National Sports Science Conference of China.
17. Zhou, X. (2020). Behavioral characteristics and influencing factors of college badminton fans in Lanzhou. *Journal of Northwest Normal University*.
 18. Li, Y.Y. (2019). Research on Influencing Factors of riders' participation behavior in Guangdong Province. *Journal of Guangzhou Institute of physical education*.
 19. Cao, X. (2020). Analysis on the influencing factors of purchase intention of sports tourism products of some consumers in Shanghai. *Journal of Shanghai Institute of physical education*.
 20. Liu, N. (2019). Research on sports consumption behavior of residents in Linyi City, Shandong Province. *Journal of Qufu Normal University*, 2019
 21. Liu, L., K. Kim, W. Sun. (2012). An Empirical Research of Factors Affecting Collaborative Decision Making System, *International Journal of Hybrid Information Technology*, 5(4), 1–10
 22. Sun, W., Dedahanov, A. T., Shin, H. Y., & Kim, K. S. (2019). Regional Identity's Role in Cambodian Microfinance Adoption: Pushing, Pulling and Mooring Factors. *Asian Social Science*, 15(12).
 23. Sun, W., Dedahanov, A. T., Shin, H. Y., & Kim, K. S. (2019). Extending UTAUT Theory to Compare South Korean and Chinese Institutional Investors' Investment Decision Behavior in Cambodia: A Risk and Asset Model. *Symmetry*, 11(12), 1524.
 24. Sun, W., Dedahanov, A. T., Shin, H. Y., & Kim, K. S. (2020). Switching intention to crypto-currency market: Factors predisposing some individuals to risky investment. *PloS one*, 15(6), e0234155.
 25. Sun, W., Dedahanov, A. T., Shin, H. Y., & Li, W. P. (2021). Using extended complexity theory to test SMEs' adoption of Blockchain-based loan system. *PloS one*, 16(2), e0245964.
 26. Chen, J., Lu, C F., Zhang, X.H. (2011). Influencing factors and Countermeasures of fitness consumption behavior. *Sports Culture Guide*, 11; 83-85
 27. Zheng, Y., Xiao, G., Jiang, G. (2008). Analysis on the development of commercial fitness clubs in China. *Sports culture guide*, 5; 15-18.
 28. Wen, J. (2008). Research on fitness consumption power of urban residents and its influencing factors. *Beijing Sport University Press*, 214
 29. Wang, F. Lang, Z. (2018). Research on college physical education teaching strategies from the perspective of lifelong fitness in the new era. *Contemporary sports science and technology*.
 30. Chen, F. (2018). Research on the construction strategy of Internet sports fitness app service platform. *Wenzhou University*, 54.