

Promotion Strategy PF PE Training Service in Guangzhou-Taking the Consumption Behavior and Utilization Rate of Large Public Stadiums as an Example

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Abstract

The aims of this research were to 1. analyze the driving factors and mechanism of urban residents' sports venue consumption behavior. 2. analyze the main game relationship between the government, stadiums, and urban residents 3. Analyze the impact of the size on the evolution path of the system and the impact of the size of the government's negligence loss on the evolution path of the system influence the behavior evolution path of three important adjustment parameters. Qualitative Research: The sample selection of interviewees was 30 respondents from Beijing, Shanghai, and Guangzhou. Quantitative Research was used by China's professionals by stratified random sampling of the field survey of 1,274 questionnaires. The findings: 1. the analyzed driving factor and mechanism of urban residents' sports venue consumption behavior indicated the residents adopt two behavioral strategies: "exercise in the stadium" and "exercise in the gymnasium". 2. the analysis of the main game relationship between the government, stadiums, and urban residents indicated (1) the behavior of stadiums and gymnasiums and (2) the behavior in sports venues above that subjective. (3) the analysis of the predictive effect of psychological factors on the overall interpersonal consumption behavior in stadiums and gymnasiums at the statistically significant level of .01. And 3. the analysis of impact of the size on the evolution path of the system and the impact of the size of the government's negligence loss on the evolution path of the system influence the behavior evolution path of three important adjustment parameters indicated a theoretical model of the impact mechanism of the consumption behavior of urban residents' stadiums and gymnasiums.

Keywords: Large Public Stadiums; Utilization Rate; Consumption Behavior; Influencing Factors; Psychological Accounts

Introduction

“Healthy China 2030” will deepen the integration of national fitness and national health. The "Outline" proposes the coordinated development of national fitness and national health, so as to build a fundamental path to achieve a well-off society in an all-round way (Chao, 2015). Healthy China takes national health as the primary goal, and national health is complemented by three elements: good health literacy, healthy lifestyle and healthy physique (Lifang, 2017). Among them, good health literacy is the foundation of national health, healthy lifestyle is the main path of national health, and healthy physique is the external manifestation of national health (Lingyun, 2011).

In order to promote the smooth implementation of the national fitness plan and ensure the effective development of the Healthy China strategy, my country has specified the specific requirements in terms of the number of national fitness people, the area of gymnasiums, sports facilities and sports events in the "Outline", and the specific number of physical exercisers in 2020. It will reach 435 million people and 530 million people in 2030; in 2030, the per capita sports ground area will not be less than 2.3 square meters, and a network of public sports facilities at the county and village levels will be basically built; in terms of improving the public service system for national fitness, Put forward the requirements for the overall construction of public facilities for national fitness, and strengthen the construction of fitness trails, national fitness centers and other venues and facilities; in the promotion of national fitness plans, realize national fitness for daily life, and actively explore special fitness projects suitable for different groups of people and different geographical characteristics. Promote Taijiquan, shuttlecock kicking and other ethnic, folk, and traditional folk sports (Zhang et al., 2018; Kai et al., 2014).

“Healthy China” integrates health into sports, education, environment and other fields, breaking the traditional thinking of "disease treatment" and breaking through the relative separation of medical, health and sports. From a logical perspective, national fitness is an important carrier for the sports field to serve the healthy China strategy (Bai & Liu, 2013). Therefore, in order to ensure the high-quality realization of the important strategy of "Healthy China", as a key means of realizing the combination of high-level requirements of the sports industry and individual physical health requirements, national fitness should become a key promotion project (Zhiwen, 2019; Vermeir & Verbeke, 2008).

Fitness can guarantee the health of the whole population. Participating in fitness activities can reduce the risk of chronic diseases, fight aging, prolong life, and improve the quality of life. On the other hand, it can maintain mental health and prevent mental diseases such as depression and anxiety disorder (Sun et al., 2014). Without national health, there will be not comprehensive well-off. National fitness is an important driving force for the all-round development of human beings and the all-round economic and social development, and is a key link to achieve national health (Wenlong, 2015).

The summarize, the great significance to improve the utilization rate of large public

stadiums in the context of Healthy China. However, compared with developed countries, my country currently lacks a long-term incentive mechanism for the utilization rate of large public stadiums, and there is a lack of a guiding mechanism for the fitness behavior of the masses. On the other hand, residents lack fitness voluntariness (Yunlong & Xubin, 2016). Therefore, how to effectively adjust the interest distribution of the government, residents and local regulatory authorities of stadiums, and how to solve the interference and obstacles that cause the waste of stadium resources, so as to optimize the utilization rate of large public stadiums, better serve the national strategy, and comprehensively Improving the national health level is the basic starting point of this research (Ke & Yu, 2023; Zhao & Phakdeephrot, 2023). Based on the perspective of tripartite game, this paper aims to deeply excavate the influencing factors and driving mechanism of the utilization rate of large-scale public stadiums, and provide theoretical and empirical basis for the government to formulate targeted guiding policies to improve the utilization rate of large-scale public stadiums.

Research Objective

1. To analyze driving factor and mechanism of urban residents' sports venue consumption behavior.
2. To analyze the main game relationship between the government, stadiums and urban residents
3. To analyze impact of the size on the evolution path of the system and the impact of the size of the government's negligence loss on the evolution path of the system influence the behavior evolution path of three important adjustment parameters.

Population Scope

(1) Qualitative Research: The sample selection of interviewees were 30 respondents from Beijing, Shanghai and Guangzhou by stratified sampling to ensure the representativeness of the sample indicated Face-to-face interviews have content flexibility, Online interview has the advantages of time and geography through online recruitment and qualification screening,

(2) Quantitative Research: using China's professional questionnaire website to distribute part of the questionnaires by stratified random sampling of the field survey 1,520 questionnaires were finally recovered, and the samples with missing or more than 8 consecutive questions of the same value were deleted. 1,274 questionnaires were effectively recovered, with an effective recovery rate of 83.8%. The interview time of this study is from October to November 2022, and the questionnaire survey time is from November to December 2022. The paper was written from December 2022 to February 2023.

Literature Review

According to the theoretical model of influencing factors of consumption behavior of large public sports venues, the proposes of this paper the following four types of assumptions to explain the influence mechanism of consumption behavior of sports venues (Hoelzl et al., 2009; Sun et al., 2014), namely, the hypothesis of the relationship between individual psychological factors and consumption behavior of sports venues, the hypothesis of the relationship between situational factors and consumption behavior of sports venues (Hossain, 2018; Wenlong, 2015), the hypothesis of the regulatory role of dual channel psychological.

Conceptual Framework

In this paper determines the framework that shown in Figure 1

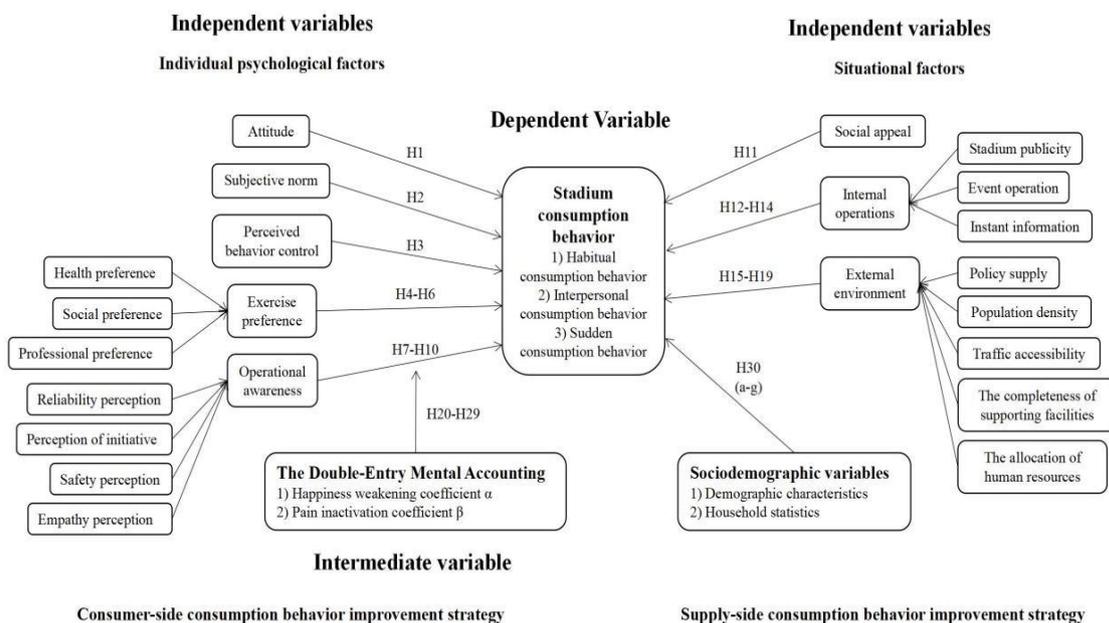


Figure 1 Framework

Research Methodology

The development of a high-quality scale conforming to the content of this paper must strictly follow steps, the specific steps, and steps that showed the progressive relationship in Figure 1.

(1) Based on the specific research questions, objects, contents and objectives, and on the basis of literature analysis, qualitative research and expert consultation, the influencing factors and variables of the consumption behavior of urban residents' stadiums and gymnasiums are determined.

(2) Based on the literature and resident interview data, the relationship between the variables affecting the consumption behavior of large public stadiums and gymnasiums of urban residents is explored, and relevant theoretical models are constructed, and relevant assumptions are put forward.

(3) According to the research model, the relevant mature scales at home and abroad are used for reference, and the foreign scales are modified locally. If there is not mature scale to used for reference, the scale of influencing factors on the consumption behavior of urban residents' stadiums and stadiums is developed independently.

(4) The pre-survey collected data through field survey and network distribution, and then tested the reliability and validity of the initial scale.

(5) According to the results of data analysis, the initial scale was revised and verified again until the final formal research scale was formed.

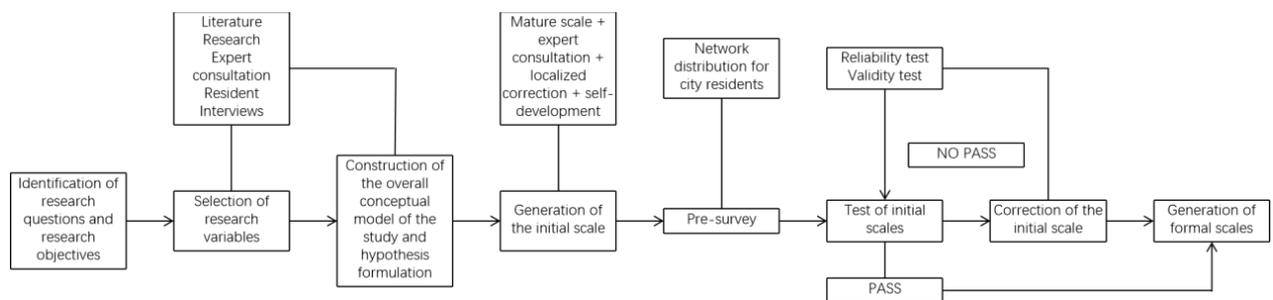


Figure 2 The steps of scale development

Result

1. The analyze driving factor and mechanism of urban residents' sports venue consumption behavior. Hypothesis on the relationship between individual psychological factors and consumption behavior of sports venues.

In this game, the government, sports venues and residents were selected as the subjects of the game, and not other subjects involved, and all three parties are bounded rational indicated there wasn't completely rational person.

The government will grant financial subsidies to stadiums and gymnasiums by issuing the list of large sports venues subsidized by the central financial funds to promote the better opening of large sports venues to the public at low prices or free of charge, and improve the level of public sports services. In order to avoid the diversion of the special funds, so that every penny is "used on the edge of the sword", it is necessary to supervise the stadiums and gymnasiums; Stadium owners can provide economic incentives to residents in the form of reducing tickets or issuing sports consumption vouchers, and obtain financial subsidies from the government; Residents can enter the stadium and gymnasium for fitness at low price or free to achieve the dual health and pleasure of body and spirit.

In order to deeply analyze the impact of key variables on the game system, it is assumed that the evolution of both sides of the game is not affected by external factors. The ultimate goal is win-win cooperation among the three parties indicated the synergy of the government, large public stadiums and urban residents can significantly and actively promote the promotion of public stadiums and gymnasiums.

At the initial stage of the game, assuming that the probability of the government, sports venues and residents choosing "government supervision", "large public sports venues reducing tickets or issuing sports consumption vouchers" and "residents exercising in large public sports venues" is x, y, z , respectively, then choose "government does not supervise" The probabilities of "large public stadiums and gymnasiums do not reduce tickets or issue sports consumption vouchers" and "residents do not exercise in large public stadiums and gymnasiums" are $1-x, 1-y, 1-z$, respectively. Therefore, the government adopts two behavioral strategies: "government supervision" and "government non-supervision". The stadium side adopts two behavioral strategies: "ticket reduction or issuance of sports consumption vouchers" and "no ticket reduction or issuance of sports consumption vouchers". The residents adopt two behavioral strategies: "exercise in the stadium" and "exercise in the gymnasiums".

2. The analyze the main game relationship between the government, stadiums and urban residents.

1) The exploratory factor analysis of psychological factors. In this paper, attitude, subjective norms and perceived behavior control in psychological factors are divided into 9 questions. At the same time, the total variance interpretation rate of the three common factors reached 64.891%, and the overall interpretation rate reached an acceptable level.

2) The factor analysis of situational factors. This paper makes exploratory factor analysis in 10 items of three variables such as namely social infectivity, policy supply, and human resource allocation. The division of each item of social appeal, policy supply, and human resource allocation conforms to the original design in the initial scale and the factor load of each item exceeds 0.5

3. The analyze impact of the size on the evolution path of the system and the impact of the size of the government's negligence loss on the evolution path of the system influence the behavior evolution path of three important adjustment parameters. According to the above four assumptions, the final government, large public sports venues and urban residents have formed eight strategic combinations as shown in the Figure 2.

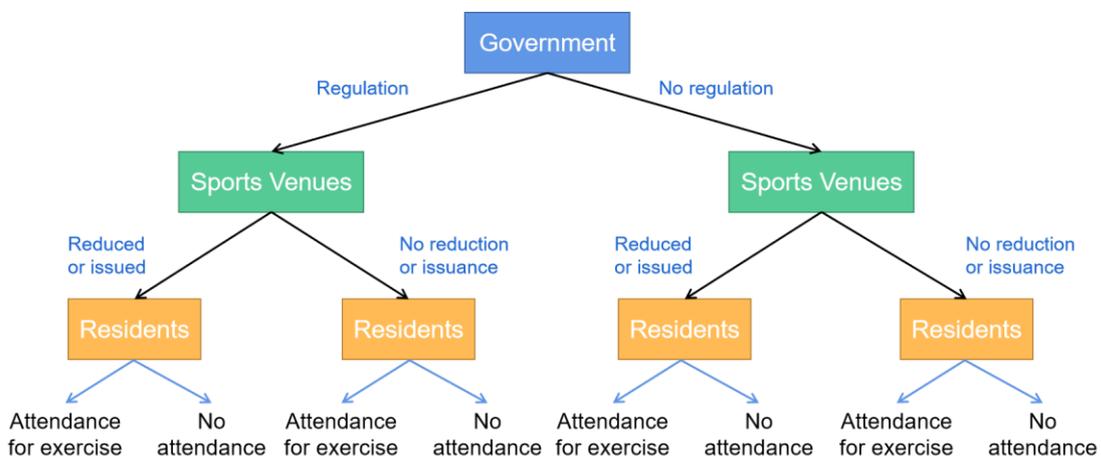


Figure 2 Evolutionary game model

The parameters of the three game players are described as following: x is the probability of government supervision; y is the probability of reducing tickets or issuing sports consumption vouchers for sports venues; z is the probability of residents to exercise in the stadium; b is financial subsidies issued by the government; s refers to the social benefits brought to the government by residents participating in sports activities under the condition that they have received the reduced or exempted tickets or sports consumption vouchers; r is the cost of government supervision; p is penalties for stadium and gymnasium that do not reduce or reduce tickets or do not issue sports consumption vouchers according to regulations; c is the net cost for residents to exercise in the stadium; k refers to the loss of satisfaction to the government when the residents arrive at the stadium but fail to obtain ticket reduction or sports consumption vouchers.

Research Discussion

1. From the perspective of improving the utilization rate of large public stadiums and gymnasiums, this paper constructs and verifies the theoretical model of influencing factors of the consumption behavior of urban residents' stadiums and gymnasiums, and divides the consumption behavior of urban residents' stadiums and gymnasiums into three dimensions, namely, habitual consumption behavior of stadiums and gymnasiums, interpersonal consumption behavior of stadiums and gymnasiums and sudden consumption behavior of stadiums and gymnasiums.

2. Using the qualitative research method, the in-depth interview data of 30 residents in China's typical first-tier cities (Beijing, Shanghai, Guangzhou) were sorted out. Based on the grounded theory, the core influencing factors and mechanisms of urban residents' consumption behavior in stadiums and stadiums were clarified, including attitude, perception and action control, subjective norms, sports preferences, operation perception, dual-channel psychological accounts, social appeal, policy supply, supply and demand and layout Ten main categories, including human resource allocation, internal operation and socio-demographic variables, are integrated into a unified framework, and a theoretical model of factors affecting the consumption behavior of urban residents' stadiums and gymnasiums is constructed. Three typical relationship structures are proposed, which are: 1) individual psychological characteristics, dual-channel psychological accounts, and situational factors directly affect the consumption behavior of urban residents' stadiums and gymnasiums; 2) Double-channel psychological account (happiness weakening coefficient α , Pain passivation coefficient β) There is a moderating effect in the influence path of individual psychological characteristics on the consumption behavior of urban residents' stadiums and gymnasiums; 3) There are significant differences in the consumption behavior of urban residents in the social demographic variables.

3. Through qualitative analysis, the connotation and structure of relevant main categories are defined: 1) The three-dimensional structure of sports preferences in psychological

factors, namely health preferences, social preferences and professional preferences; 2) The four-dimensional structure of operational perception in psychological factors, namely, relying on sexual awareness, active sexual awareness, safety sexual awareness and empathy sexual awareness; 3) Two-dimensional structure of dual-channel psychological account in psychological factors, namely, happiness weakening coefficient α And pain passivation coefficient β and 4) Situational factors are the three-dimensional structure of the external environment, namely, policy supply, supply and demand and distribution, and human resource allocation; 5) The three-dimensional structure of internal operation in psychological factors, namely venue publicity, event operation and instant information.

Recommendations

Recommendations for this research

1. Exploration of influencing factors and limitations of scale development. Based on the relevant literature, this paper uses qualitative and quantitative methods to explore the influencing factors of the consumption behavior of urban residents in China's stadiums and stadiums, and develops a research scale of the consumption behavior of local urban residents in accordance with China's national conditions. Although the validity of the scale in this study has been confirmed in the formal investigation process, there is still some subjectivity in the end, and it is difficult to fully guarantee that it covers all the influencing factors. In addition, this study does not systematically consider the differences between the owners of sports venues and the construction background in terms of internal operation and external environment. In the follow-up study, further research such as behavioral experiments can be considered.

2. Limitations of the survey sample. Due to the limitations of time, place, personnel, money and other factors, a total of 1274 valid questionnaires were collected through on-site distribution and online distribution. Although the sample basically conforms to the demographic characteristics of the cities under investigation, and also meets the basic requirements of the structural equation model for the sample size, only analyzing some first-tier cities in China does not fully reflect the current situation and differences of the consumption behavior of urban residents in stadiums and stadiums across the country. The sample can be further expanded in the follow-up study.

Recommendations for further studies

1. Expand and balance the sample distribution area. In the follow-up study, the scope of the survey will be extended from the old first-tier urban residents to the urban residents of various types of large, medium and small cities in the east, middle and west to further enrich the survey data and improve the universality of the research conclusions.

2. Perfection of the survey scale. In the future, we will use the research methods of behavioral economics, experimental economics and other disciplines to design behavioral intervention experiments and data simulation, excavate the deeper psychological and situational

factors that affect the consumption behavior of residents in stadiums and stadiums, further improve the survey scale, and carry out multiple validation and revision.

3. Deeply explore the quantitative analysis of policy effects. In the future, we will consider the policy intervention experiment and behavior intervention experiment, make quantitative analysis of the policy formulation effectiveness and the policy implementation effectiveness of residents and stadiums, and analyze the regulatory effect under a variety of scenario policy combinations, so as to provide a basis for the realization of national fitness and healthy China.

4. Expand the research object. Future research can systematically deepen the research on the differences of the types of venue owners in the consumption behavior of stadiums and gymnasiums, obtain survey data through qualitative research and design scale, and use empirical analysis methods to explore the impact mechanism and action path of the types of owners.

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