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The Impact of Participation Motivation on Satisfaction in Leisure Tennis Camps the Mediating Effect of Perceived Value

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Abstract: *The purpose of this study is to examine the localized dimensional structure of participation motivation among leisure tennis camp participants in China and to investigate the mediating role of multi-dimensional perceived value (functional, emotional, and social) and the moderating effect of different operational models in the relationship between participation motivation and satisfaction. Amid the rapid transformation of the global tourism industry, sports tourism has emerged as a dynamic growth sector. Leisure tennis camps have become increasingly popular among middle- and high-income groups due to their combined attributes of competitive sport and social engagement. Under the framework of the Healthy China 2030 initiative, China's tennis population has expanded significantly. However, the leisure tennis camp industry continues to face structural challenges, including high product homogeneity and low repurchase rates, which constrain sustainable development. Grounded in the classic motivation–experience–satisfaction paradigm, this study adopts a cross-sectional quantitative research design. Data were collected from 428 participants in leisure tennis camps across four southern Chinese provinces—Guangdong, Fujian, Hainan, and Yunnan—using stratified convenience sampling. Structural equation modeling (SEM) and Bootstrap mediation analysis were conducted using IBM SPSS Statistics 26.0 and AMOS 24.0. The results reveal a localized participation motivation system specific to the leisure tennis camp context and confirm that functional, emotional, and social perceived values significantly mediate the relationship between participation motivation and satisfaction. Furthermore, operational models demonstrate moderating effects on key structural paths. The study enriches the theoretical understanding of multi-dimensional perceived value mechanisms in sports tourism and provides practical guidance for tennis camp operators and policymakers to enhance product differentiation and promote the high-quality development of China's sports tourism industry.*

Keywords: *sports tourism; leisure tennis camps; participation motivation; perceived value; satisfaction; SEM*

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1. Introduction:

The global tourism industry is undergoing a profound transformation from traditional sightseeing to experiential consumption, with sports tourism becoming a new growth driver integrating health demands and leisure experiences. According to data from the United Nations World Tourism Organisation (UNWTO), the sports tourism sector is growing at an annual rate of 14%, far exceeding the 4%-5% growth rate of the overall tourism industry, and its global market size reached US$564.7 billion by 2023. As a typical high-end sports tourism product, leisure tennis camps have formed mature development models in Europe and North America: Europe has a "tournament + training + holiday" model, while North America focuses on "family bonding + skill enhancement" composite scenarios, both of which have achieved high market recognition and repurchase rates.

In China, the sports tourism market has experienced explosive growth under the dual drive of policy support and consumption upgrading. The in-depth implementation of the "Healthy China 2030" Planning Outline and the National Fitness Programme (2021-2025) has promoted the transformation of sports consumption from spectator-oriented to participation-oriented. Data from the China Tennis Association (2024) shows that the china tennis population has exceeded 4 million with an annual growth rate of 15%, and the 30-45 age group, which has strong holiday consumption power, accounts for more than 60% of this demographic. However, the development of china leisure tennis camps is still in the initial stage, facing two core industry pain points: on the product side, the homogeneity rate is as high as over 80%, with most camps only providing basic technical training and lacking personalized programs and characteristic social services; on the operation side, the overall repurchase rate is less than 15%, significantly lower than the 35% average in European and American markets.

From a theoretical perspective, the classic "motivation-experience-satisfaction" paradigm in tourist behavior research has obvious adaptability limitations when applied to the leisure tennis camp scenario. First, the existing leisure motivation measurement tools cannot cover the scenario-specific motivations of tennis camps, such as scarce venue experience and short-term intensive skill improvement. Second, the transmission mechanism of multi-dimensional perceived value between participation motivation and satisfaction is ambiguous, and the differences in mediating strength of functional, emotional and social value have not been verified. Third, Western research based on individualistic culture lacks localized adaptation in China's collectivist cultural context, and the influence of policy factors and young tourist demand characteristics has not been fully considered.

At the practical level, the global sports tourism industry is shifting from "scale expansion" to "quality improvement", and understanding the linkage mechanism between tourist motivation and value perception is the key to improving service quality and achieving differentiated competition. For China's tennis camp industry, over 90% of operators lack mature operational models, and the industry's predicament is essentially a reflection of the inadequate identification of tourists' core motivations and the imprecise grasp of perceived value transmission paths. Therefore, it is urgent to carry out in-depth research on the relationship among participation motivation, perceived value and satisfaction of leisure tennis camp participants, so as to provide scientific theoretical support and practical operational guidance for the industry's high-quality development.

2. Review of Literature:

This study systematically reviews the existing literature on the core variables of participation motivation, perceived value and tourist satisfaction, and constructs the theoretical framework and research hypotheses of the study based on the research progress in the field of sports tourism and tennis camp scenarios.

2.1 Participation Motivation:

The classic theoretical foundation of participation motivation research includes Crompton's (1979) Push-Pull Theory and Beard & Ragheb's (1983) Leisure Motivation Scale (LMS). The Push-Pull Theory divides tourism motivation into internal push factors (psychological needs) and external pull factors (destination attributes), which is the cornerstone of tourism motivation research. The LMS scale refines leisure motivation into six core dimensions and is widely used in leisure research, but it fails to consider the attribute differences of specific sports tourism scenarios. In the sports tourism field, Hibbert et al. (2013) condensed sports tourism motivation into four core dimensions: skill improvement, social connection, achievement pursuit and health needs, confirming the scenario-specificity of motivation dimensions. For the leisure tennis camp scenario, Li et al. (2023) found that in addition to general sports tourism motivations, scarce venue experience and short-term intensive skill improvement account for 45% of the core motivations of Chinese participants, especially post-1995 tourists. However, existing research has not yet established a complete motivation dimension system covering the dual attributes of "sports training + leisure vacation" of tennis camps.

Perceived Value:Zeithaml (1988) first defined perceived value as the overall evaluation formed by consumers weighing the benefits and costs of products or services, emphasizing its subjectivity and individual variability. Sweeney and Soutar (2001) developed the PERVAL scale, dividing perceived value into four dimensions: functional, emotional, social and price value, which has become a universal measurement tool in various fields. In the sports tourism

field, perceived value is characterized by the "dominance of sports attributes", and Wu et al. (2020) subdivided functional value into facility professionalism and service adaptability in golf camp research, finding that skill motivation-oriented tourists are more sensitive to facility professionalism. For leisure tennis camps, perceived value has the dual core characteristics of "skill value + vacation value". chinese tourists pay more attention to emotional value (atmosphere comfort) compared with European and American tourists, but existing research has not distinguished between training functional value and vacation service value, lacking a subdivided dimension system for tennis camp scenarios.

2.2 Tourist Satisfaction

Oliver's (1980) Expectation-Confirmation Theory (ECT) is the core theoretical foundation of tourist satisfaction research, which holds that satisfaction depends on the perceived difference between actual experience and expected level. Tribe and Snaith (1998) and Parasuraman et al. (1988) supplemented the measurement dimensions and influencing factors of satisfaction from the perspectives of cognitive judgment and service quality respectively. In the sports tourism field, the formation of satisfaction shows a chain influence characteristic of "motivation → experience → value". Rubén et al. (2023) found that coach professionalism and player skill homogeneity have a significant moderating effect on tennis camp satisfaction, and when both variables are at a high level, satisfaction scores increase by 37%. The satisfaction of leisure tennis camp participants is dually regulated by professional experience and leisure experience, but existing research has not yet established a complete "motivation → perceived value → satisfaction" transmission model for this scenario.

2.3 Theoretical Framework and Research Hypotheses

This study constructs an integrated theoretical framework centered on the core chain of "participation motivation → perceived value → satisfaction", with the Push-Pull Theory, Perceived Value Theory and Experience Economy Theory as the theoretical support. The Push-Pull Theory explains the driving logic of participation motivation, the Perceived Value Theory clarifies the mediating mechanism of multi-dimensional value, and the Experience Economy Theory reinforces the scenario adaptability of the framework. Based on the literature review, the study proposes five research hypotheses: H1 that participation motivation has a significant positive impact on satisfaction with different intensity; H2 that participation motivation has a dimension-matched positive impact on multi-dimensional perceived value; H3 that perceived value plays a significant mediating role between participation motivation and satisfaction; H4 that there are differences in the mediating strength of each dimension of perceived value; H5 that operation models have a moderating effect on the transmission path of the core chain.

3. Objectives of the study:

Combined with the research background, existing pain points in the leisure tennis camp industry, and the theoretical gaps identified in the current academic research, this study formulates four core research objectives, which are mainly focused on exploring the intrinsic logical relationship among participation motivation, perceived value and satisfaction of leisure tennis camp participants, so as to provide theoretical support and practical guidance for the high-quality development of the leisure tennis camp industry. The specific research objectives are as follows:

3.1 Analyze the localized dimensional composition of leisure tennis camp participants' participation motivation and its direct impact on visitor satisfaction

Based on the characteristics of the domestic leisure tennis camp market and the group characteristics of participants, this objective aims to systematically analyze the localized dimensional composition of participation motivation of leisure tennis camp participants, which mainly includes three core dimensions: skill improvement, social connection and leisure relaxation. On this basis, it will further explore the direct impact of each dimension of participation motivation on participants' satisfaction, clarify the strength and direction of the impact of different motivation dimensions, and identify the key motivation factors that can effectively promote participants' satisfaction, so as to lay a foundation for the follow-up analysis of the intermediary mechanism.

3.2 Examine the significant influence of each dimension of participation motivation on the three dimensions of perceived value and verify the dimensional matching relationship between them

This objective focuses on examining the significant influence of each dimension of participation motivation (skill improvement, social connection, leisure relaxation) on the three core dimensions of perceived value, namely functional value, emotional value and social value. It will deeply analyze the internal correlation mechanism between different participation motivation dimensions and each perceived value dimension, verify the dimensional matching relationship between participation motivation and perceived value, clarify which motivation dimensions mainly act on which perceived value dimensions, and whether there is a cross-dimensional influence effect, so as to improve the theoretical framework of the relationship between participation motivation and perceived value in the context of leisure tennis camps.

3.3 Test the predictive role of each dimension of perceived value on the satisfaction of leisure tennis camp participants, and clarify the contribution of different value dimensions to satisfaction

On the basis of clarifying the relationship between participation motivation and perceived value, this objective will further test the predictive role of each dimension of perceived value (functional value, emotional value, social value) on the satisfaction of leisure tennis camp participants through empirical analysis. It will quantify the predictive power of each perceived value dimension on satisfaction, clarify the contribution degree of different value dimensions to participants' satisfaction, sort out the importance of each value dimension, and provide specific and targeted direction guidance for leisure tennis camp operators to optimize service quality, improve participants' perceived value and further enhance satisfaction.

4. Research Methodology:

Type of research this study adopts a “cross-sectional quantitative research design”, focusing on the single-visit or one-way experience scenarios of leisure tennis camp participants. The study takes participation motivation as the independent variable, satisfaction as the dependent variable, perceived value as the mediating variable, and operation model as the moderating variable, aiming to quantitatively verify the direct effect, mediating effect and moderating effect among the variables, and test the proposed research hypotheses.

Sample size according to Hair et al. (2014)'s recommendation that the sample size should be 5-10 times the number of observed items, the study's questionnaire includes 32 observed items, with a target of 400 valid responses. After on-site and online distribution and strict data screening, a total of “428 valid questionnaires” were collected, meeting the requirements of empirical analysis.

Respondents are participants of leisure tennis camps in four core southern Chinese regions (Guangdong Pearl River Delta, Fujian Xiamen/Fuzhou, Hainan Sanya/Haikou, Yunnan Kunming), and all meet the following core eligibility criteria: (1) Have participated in a leisure tennis camp with a single session duration of ≥1 day within the past three months; (2) Aged ≥18 years old, with the cognitive ability to complete the questionnaire independently; (3) Have actual experience of the "participation motivation-perceived value-satisfaction" continuum. The sample structure is highly consistent with the actual customer distribution of china tennis camps: 78% are aged 25-45 years old; 42% are tennis beginners, 38% are intermediate level, and 20% are advanced level; 29% have experience in high-end customized camps, 41% in mass experience-oriented camps, and 30% in family parent-child camps.

The study uses both "**primary data**" and "**secondary data**": Primary data: Collected through a structured questionnaire designed for the study, which includes demographic information, participation motivation scale, perceived value scale and satisfaction scale. All scales are adapted from mature and validated instruments in existing research and adjusted to the characteristics of leisure tennis camps, with a 5-point Likert scale used for scoring.
Secondary data: Collected from relevant literature, industry research reports, the annual development report of Chinese tennis released by the China Tennis Association, statistical data of UNWTO, and research papers in the fields of sports tourism and leisure management.
The study uses IBM SPSS Statistics 26.0 and AMOS 24.0 as the main data analysis tools, with the statistical significance level set at $p \leq 0.05$.

5. Findings of the study

Combined with the empirical data analysis of this research and the actual operation status of leisure tennis camps in China, after multi-dimensional statistical tests and cross-comparative verification, the core preliminary findings are systematically summarized in light of the theoretical research and frontline industry practice of leisure tennis camps:

The three dimensions of leisure tennis camp participants' participation motivation (skill improvement, social connection, leisure relaxation) all have a significant positive impact on satisfaction, and there are obvious differences in the impact intensity, with skill improvement motivation having the strongest impact, followed by social connection motivation, and leisure relaxation motivation the weakest. This result is in line with the consumption demand characteristics of Chinese middle and high-income groups for tennis camps, and also reflects the differentiated weight of diverse participation demands in camp experience evaluation.

There is a significant dimension-matched positive correlation between participation motivation and perceived value: skill improvement motivation has the strongest impact on functional value, social connection motivation has the strongest impact on social value, and leisure relaxation motivation has the strongest impact on emotional value, which verifies the scenario-specific matching relationship between motivation and value perception and breaks the single logic of universal value perception.

The three dimensions of perceived value (functional, emotional, social) all have a significant positive predictive effect on the satisfaction of tennis camp participants, and functional value is the core driving factor for high-end customized camp participants, while social value and emotional value are more important for mass experience-oriented and family parent-child camp participants respectively. This distinction clearly shows the differentiated core demands of participants in different camp types.

Perceived value plays a significant partial mediating role between participation motivation and satisfaction, and each dimension of perceived value has different mediating strength in the relationship between different motivation dimensions and satisfaction, forming a differentiated mediating pathway that reveals the multi-level transmission logic from motivation to satisfaction.

Different operation models have a significant moderating effect on the "motivation-perceived value-satisfaction" transmission path: the conversion efficiency of "skill improvement motivation → functional value" is the highest in high-end customized camps, the conversion efficiency of "social connection motivation → social value" is the highest in mass experience-oriented camps, and the conversion efficiency of "leisure relaxation motivation → emotional value" is the highest in family parent-child camps. This regulatory effect provides practical empirical support for targeted demand matching of camps.

The sample characteristics show that the core participants of China leisure tennis camps are 25-45 years old middle and high-income groups, with beginners accounting for the largest proportion. Their demand for tennis camps is not only limited to skill improvement, but also has strong social and leisure needs, reflecting the composite consumption characteristics of "sports + vacation" and driving the transformation of camp service orientation.

The main factors affecting the perceived value and satisfaction of participants include coach professionalism, court facility standards, skill-matched player grouping, and camp service atmosphere. These key indicators are the core focus for tennis camp operators to optimize service quality and enhance overall operational competitiveness.

6. Suggestions:

Based on the research findings, combined with the current development status and pain points of China's leisure tennis camp industry, targeted suggestions are put forward from the perspectives of industry operation, theoretical research and policy formulation:

6.1 Industry Operation Suggestions

For high-end customized camps: Focus on optimizing functional value, equip ITF-certified exclusive coaches to provide one-on-one personalized training programs, introduce scarce venue resources such as clay courts and seaside courts, and establish a closed-loop service of "training → feedback → adjustment" to meet the demand of high-income elites for skill improvement efficiency and experience scarcity.

For mass experience-oriented camps: Strengthen the design of social value, adopt a skill-based player grouping system to organize collective competitive events, set up tennis social salons, and build long-term online interactive communities to solve the core pain point of beginners in finding tennis partners.

For family parent-child camps: Prioritize the creation of emotional value, develop exclusive parent-child tennis training courses and fun challenge activities, set up child safety protection zones and family rest stations, and balance the dual needs of children's skill improvement and parents' leisure experience.

6.2 Theoretical Research Suggestions

Further enrich the localized motivation dimension system of leisure tennis camps, and incorporate policy factors and regional cultural characteristics into the research framework to improve the scenario adaptability of sports tourism motivation theory.

Strengthen the research on the chain mediating effect and moderating effect of the "motivation-perceived value-satisfaction" model, and explore the influence of other variables such as tennis proficiency and consumption level on the core transmission path.

Carry out comparative research on tennis camp participants in different regions and age groups, and analyze the differences in motivation and value perception to provide a more refined theoretical basis for industry segmentation operation.

6.3 Policy Formulation Suggestions

Local governments should take the opportunity of building "sports + tourism" characteristic IPs, increase the support for tennis camp venue construction and professional coach training, and guide the industry to reduce product homogeneity through industrial planning and resource integration.
The tennis association should formulate industry standards for leisure tennis camps, standardize the service content and quality evaluation system, and promote the healthy and standardized development of the industry.

Relevant departments should introduce preferential policies to encourage the integration of tennis camps with local tourism resources, and develop characteristic tennis tourism products combining culture, leisure and sports to enhance the overall competitiveness of the industry.

References

[1] Beard, J. G., & Ragheb, M. G. (1983). Measuring leisure motivation. *Journal of Leisure Research*, *15*(3), 219–228.

[2] Chinese Tennis Association. (2024). *2023 annual report on the development of tennis in China* [Report]. People's Sports Publishing House.

[3] Crompton, J. L. (1979). An assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image. *Journal of Travel Research*, *17*(4), 18–23.

[4] Hibbert, S. A., Cummin, E. G., & Saren, M. (2013). Sport tourism motivation: A critical review and research agenda. *Tourism Management Perspectives*, *8*, 39–48.

[5] Li, H., Liu, F., & Chen, M. (2023). A study on the relationship between motivation dimensions and behavioral intentions of sports vacation tourists: Taking golf and tennis camps as examples. *Sports Culture Guide*, (5), 89–96.

[6] Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17*(4), 460–469.

[7] Rubén, J., García, M., & Martínez, A. (2023). The role of coach professionalism and peer homogeneity in tennis camp satisfaction. *Journal of Sports Tourism*, *27*(3), 201–218.

[8] Wu, C. H., Liang, C. C., & Liu, C. H. (2020). The mediating role of perceived value in the relationship between golf tourists' motivation and satisfaction. *International Journal of Sports Marketing & Sponsorship*, *21*(3), 289–306.

[9] World Tourism Organization. (2021). *The first world sports tourism congress: The role of sport for tourism recovery* [Report]. Author.

[10] Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, *52*(3), 2–22.