

Website: https://so07.tci-thaijo.org/index.php/IJSASR/index DOI: https://doi.org/10.60027/ijsasr.2023.3268

Characteristics and Influencing Factors of College Students' Sports Consumption in Guangzhou

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Received 29/07/2023 Revised 18/08/2023 Accepted 26/08/2023

Abstract

Background and Aim: This article investigates influencing factors of sports consumption among college students in Guangzhou using an empirical approach grounded in consumer economics. The study contributes to theoretical research and informs government-led consumption policies and corporate strategies. The research explores factors affecting college students' sports consumption, including physical fitness, sports skills, referee knowledge, exercise methods, and sports protection knowledge.

Materials and Methods: The study utilized questionnaires and expert interviews. Experts in sports psychology, sports economics, and physical education, and Guangzhou University students participated. A research framework was developed through literature analysis and expert input, guiding questionnaire creation. Data underwent collection, organization, and analysis using methods like structural equation modeling, including hypothesis testing.

Results: The research revealed that physical fitness, sports skills, referee knowledge, exercise methods, and sports protection significantly impact college students' sports consumption. Physical fitness negatively influenced sports goods and participation-based sports consumption. Sports skills positively influenced sports goods and ornamental sports consumption. Referee knowledge had positive effects on all three consumption types. Exercise methods and sports protection also positively affected all consumption types.

Conclusion: This study emphasizes the considerable influence of multiple factors on college students' sports consumption. Physical fitness affects consumption diversely, with negative impacts on sports goods and participation-driven consumption, but a positive impact on ornamental sports consumption. Sports skills positively affect sports goods and ornamental sports consumption. Referee knowledge consistently contributes to all sports consumption types. Furthermore, exercise methods and sports protection positively impact all consumption dimensions. These findings underscore the intricate interplay of factors and highlight the need for customized strategies to engage college students in diverse sports consumption behaviors.

Keywords: Characteristics; Influencing Factors; College Students' Sports Consumption

Introduction

In the context of China's evolving economic and societal landscape, the rising standards of living have sparked an increased demand for sports activities and healthier lifestyles. University students, as future societal leaders, hold significant sway over their own physical and mental well-being, as well as the broader sports industry and public health on both national and societal levels.

Given Guangzhou's role as a prominent economic center in southern China, its abundant higher education resources, and its substantial student population, the sports consumption behaviors of university students in Guangzhou carry considerable representational importance. However, existing research lacks a comprehensive examination of this demographic's sports consumption behaviors within the city. Therefore, a rigorous empirical investigation into the sporting consumption behaviors of Guangzhou's university students is of both theoretical and practical significance.

This research primarily aims to enhance our understanding of sports consumption behaviors among university students in Guangzhou, uncovering consumption patterns and trends. This insight provides a basis for improving the delivery of sports consumption services and creating environments tailored to university students. Moreover, delving into the factors influencing sporting consumption behaviors among Guangzhou's university students not only supports theoretical foundations but also offers practical guidance. This, in turn, assists educational institutions, governmental bodies, and relevant stakeholders in devising well-informed measures to promote sports consumption, ultimately enhancing students' overall well-being. Importantly, the implications of this study extend beyond Guangzhou; it can serve as a model for similar research endeavors focusing on university students'



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sports consumption in various locations, thereby advancing the comprehensive study of sports consumption within this demographic.

In summary, the investigation into sports consumption behaviors and their influencing factors among Guangzhou's university students not only enriches and advances theories related to sports consumption but also contributes to improving students' health and quality of life. Furthermore, it stimulates the growth of China's sports industry, underscoring the critical theoretical and practical significance of this research.

Objective

The main objective of this research is to investigate the factors and mechanisms that influence college students' sports consumption. Specifically, the study focuses on the roles of physical fitness, sports skills, referee knowledge, exercise methods, and sports protection knowledge in shaping college students' sports consumption behaviors.

Research Questions

- 1. What is the current status of sports consumption among college students in Guangzhou?
- 2. How does the level of physical fitness relate to college students' sports consumption behaviors?
- 3. What is the connection between sports skills and the sports consumption patterns of college students?
 - 4. How does referee knowledge impact college students' engagement in sports consumption?
- 5. What is the correlation between exercise methods and the types of sports consumption among college students?
- 6. How does knowledge of sports protection influence college students' participation in sports consumption?

Through addressing these research questions, the study aims to provide comprehensive insights into the dynamics of sports consumption among college students in Guangzhou and the underlying factors that drive their choices and behaviors in the realm of sports consumption.

Research Hypotheses

Bao Mingxiao (2005) posits that sports consumption demands a high level of consumptive capacity, encompassing knowledge, experience, and sports skills. Chen Xiujuan (2009) suggests that sports consumption is viable and sustainable when four key elements are present: financial resources, leisure time, desire, and skills. A literature review underscores the pivotal role of sports ability and sports knowledge as influential factors in sports consumption. Sports ability is broadly divided into sports skills and physical fitness, while sports knowledge includes exercise methods, referee knowledge, and awareness of sports protection. Moreover, sports consumption encompasses goods consumption, ornamental sports consumption, and participating sports consumption. In light of these insights, the study formulates specific research hypotheses to probe the relationship between athletic ability and sports consumption.

Hypotheses related to Physical Fitness:

H1a: Physical fitness is positively correlated with sports goods consumption.

H1 b: Physical fitness is positively correlated with total expenditure on ornamental sports consumption.

H1 c: Physical fitness is positively correlated with total expenditure on participating sports consumption.

Hypotheses related to Sports Skills:

H2a: Sports skills are positively correlated with sports goods consumption.

H2b: Sports skills are positively correlated with ornamental sports consumption.

H2c: Sports skills are positively correlated with participating in sports consumption.

Hypotheses related to Referee Knowledge:

H3a: Referee knowledge is positively correlated with sports goods consumption.





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H3b: Referee knowledge is positively correlated with ornamental sports consumption.

H3c: Referee knowledge is positively correlated with participating in sports consumption.

Hypotheses related to Exercise Methods:

H4a: Exercise methods are positively correlated with sports goods consumption.

H4b: Exercise methods are positively correlated with ornamental sports consumption.

H4c: Exercise methods are positively correlated with participating in sports consumption.

Hypotheses Related to Knowledge of Sports Protection:

H5a: Knowledge of sports protection is positively correlated with sports goods consumption.

H5 b: Knowledge of sports protection is positively correlated with ornamental sports consumption.

H5 c: Knowledge of sports protection is positively correlated with participating in sports consumption.

These hypotheses collectively provide a structured framework for examining the interplay between athletic ability and different dimensions of sports consumption among college students in Guangzhou.

Scope and Limitations of Research

This research focuses on college students in Guangzhou, examining the factors influencing their sports consumption behaviors. It provides insights into how physical fitness, sports skills, referee knowledge, exercise methods, and sports protection knowledge contribute to their choices.

Limited Demographic Coverage: The study's scope is confined to college students in Guangzhou and may not represent diverse demographic groups.

Subjective Assessment: Some aspects, such as specialized skills and sports knowledge, rely on participants' self-evaluation, introducing potential bias.

Measurement Challenges: Accurate measurement of certain skills and knowledge might be challenging, affecting the precision of results.

Geographic Specificity: The research primarily focuses on sports consumption in Guangzhou and might not reflect variations in other regions.

Consumer Spending Estimation: The accuracy of participants' expenditure estimations on different types of sports consumption might vary.

Definition of Terms

Sports Consumption: Refers to spending on sports activities and services, including goods, ornamental sports consumption, and participating sports consumption.

Sports Consumption of Goods: Involves spending on physical items like sports equipment, clothing, food, periodicals, etc.

Ornamental Sports Consumption: Relates to expenses for services like game tickets, sports exhibitions, and media services.

Participating in Sports Consumption: Involves expenditures on services like coaching, venue usage, sports rehabilitation, etc.

Physical Fitness: Encompasses attributes like strength, endurance, agility, etc., contributing to sports capability.

Sports Skills: Refers to the ability to execute specific actions required in sports.

Sports Knowledge: Includes referee knowledge, exercise methods, and sports protection knowledge.

Referee Knowledge: Understanding rules and regulations governing sports competitions.

Exercise Methods: Scientific training techniques and approaches for different sports.

Sports Protection: Knowledge of health, injury prevention, and post-activity recovery in sports.

Research Contribution

1. Academic Enrichment: The research enhances sports economics and consumption economics theories, deepening our understanding of their relevance in college students' sports consumption.





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- 2. Practical Impact: The findings inform government sports consumption policies and offer novel marketing strategies for sports businesses targeting college students.
- 3. Methodological Innovation: This study pioneers the use of structural equation modeling to explore factors affecting sports consumption, introducing a fresh approach to this research area. In summary, the research advances theories, offers practical insights, and introduces an innovative methodology to the study of college students' sports consumption behaviors.

Literature Review

Definition of Sports Consumption:

Three primary definitions of sports consumption exist. The first emphasizes sports service consumption, encompassing leisure participation, fitness services, training, medical rehabilitation, competition, information, tourism, and entertainment. The second definition, in addition to services, includes physical consumption like sports clothing and equipment (Zhong Tianlang, 2004; Couder & Kesenne, 1990). The third expands to induced consumption arising from sports consumption. This study adopts the second definition, focusing on physical and service consumption, categorized as goods, spectator, and participating sports consumption.

Theoretical Framework:

Existing theories employed in studying sports consumption include Marshall's neo-classical consumption demand theory, Becker's (1965) family-produced consumer goods theory, and Grossman's (1972) family-produced investment goods theory. Notably, differences include consideration of time input and whether sports consumption is for utility or health improvement.

Research Object:

The focus on individual versus family-level sports consumption is debated. While early studies centered on individuals, recent research increasingly examines families (Eakins, 2016; Pawlowski et al., 2011). Influencing factors are categorized into demographic, family, and environmental variables, encompassing age, gender, education, location, facility access, and sports training services (Wang, Y., et al, 2020).

Challenges in Studying Sports Consumption:

Previous research lacks specificity in analyzing sports consumption's unique attributes. Bao Mingxiao (2005) and Chen Xiujuan (2009) emphasize the need for appropriate knowledge, experience, and skills for sports consumption. Yang Mengmeng et al, note insufficient attention to sports skills in policy texts (2014-2020) and disputes about their role in sustaining sports consumption.

Consumption Ability:

Consumption economics stresses that consumption power entails not only purchasing ability but also consumer knowledge and skills. "Consumption ability" refers to consumers' knowledge and proficiency in using products to maximize their utility.

Conceptual Framework

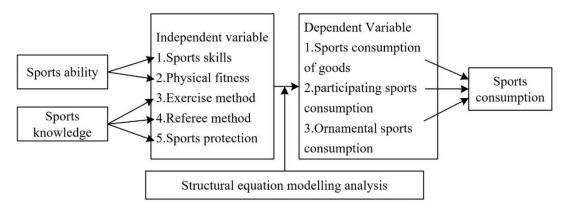


Figure 1 Conceptual Framework



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Methodology

- 1. Population and Sample: the research focuses on university students in sports-related disciplines in Guangzhou. The target population comprises around 6000 students. A sample size of 500 was chosen based on a ± 5 % margin of error. Various universities were included, such as Sun Yat-sen University, Jinan University, and Guangzhou Sport University. Sampling was done through WeChat platform group messaging. Gpower software and expert consultation determined the sample size.
- **2. Research Instrument:** The research employs Structural Equation Modeling (SEM) to validate hypothesized relationships among latent variables. SEM combines factor and path analysis, allowing a comprehensive examination of unobservable variables and their interdependencies.

Scale Development: A measurement scale was developed through a review of previous research on sports consumption factors. A panel of experts in sports psychology, economics, and physical education refined the initial scale. This process led to a measurement scale with 8 latent variables and 39 questions.

Questionnaire Design: A 5-point Likert scale was used for the research questionnaire. It had two sections: (1) basic subject information (gender, age, income, sports expenditure); and (2) Likert scale questions corresponding to the 39 items across the 8 latent variables.

Pre-Survey and Optimization: A pre-survey was conducted in two universities to optimize the questionnaire elements. Exploratory Factor Analysis and reliability tests were performed on the presurvey data to ensure questionnaire reliability and validity.

Final Questionnaire: The pre-survey feedback led to the creation of a definitive questionnaire probing factors influencing continued sports usage intent among university students. The questionnaire consisted of 39 indicator items.

3. Data Collection: Questionnaire Construction: After refining based on pre-survey feedback, the final web-based questionnaire was created using the Questionnaire Star platform (http://www.sojump.com/).

Distribution Channels: The questionnaire was shared through WeChat groups of various universities in Guangzhou, including Sun Yat-sen University, Jinan University, Guangzhou Sport University, and others. The survey was conducted over 14 days, yielding 500 valid responses.

Participant Demographics: Participants were university students in sports-related disciplines, including physical education departments, university sports teams, and sports clubs. This targeted group was relevant to the study's investigation into sports consumption factors.

Sample Validation: Rigorous methods were employed to enhance sample validity, including refining the questionnaire, strategic distribution, and advanced statistical tools during data analysis. These steps ensured the sample's representativeness and data reliability.

4. Data Analysis: Data Cleaning: The author obtained 5 0 0 complete samples from the Questionnaire Star platform, which were cleaned by removing incomplete or duplicate responses. After cleaning, 487 valid samples remained.

Descriptive Statistics: Basic descriptive statistics were applied to the data.

Reliability Testing: Questionnaire and model reliability were assessed.

Exploratory Factor Analysis (EFA): EFA was performed to determine factor loadings and relevant values.

Confirmatory Factor Analysis (CFA): CFA assessed model fit indices, convergent validity, and discriminant validity.

Structural Equation Modeling (SEM): SEM was used to analyze the structural model, determining the significance of hypothesized paths.

In conclusion, the data collection phase involved constructing the final questionnaire, distributing it through various channels, and validating the sample. The subsequent data analysis encompassed cleaning, descriptive statistics, reliability testing, EFA, CFA, and SEM to provide a comprehensive understanding of the factors influencing sports consumption among university students in Guangzhou.



International Journal of Sociologies and Anthropologies Science Reviews (IJSASR), 3 (5), September-October 2023, pages 243-254. ISSN: 2774-0366 Website: https://so07.tci-thaijo.org/index.php/IJSASR/index

DOI: https://doi.org/10.60027/ijsasr.2023.3268

Results

1. Descriptive Statistics of Sample Distribution

The provided table illustrates that more male participants filled out the questionnaires compared to females. This could be attributed to men's stronger inclination towards sports and their heightened interest in participating in surveys in this domain. The age distribution primarily centers around 18 to 25 years, coinciding with the typical age range of college students. A small percentage falls above 25, possibly representing individuals pursuing higher education levels like master's or doctoral degrees. Monthly income predominantly falls between 1500 and 3500 yuan, indicating a relatively comfortable financial status among most Guangzhou college students. Regarding annual sports consumption expenditure, only 12.73% of respondents exceed 1000 yuan, suggesting modest sports spending. Most students allocate less than 1000 yuan, showcasing comparatively lower expenditure when contrasted with developed countries' data.

2. Questionnaire reliability analysis

The reliability coefficient of the questionnaire is 0.980, indicating the high reliability of the research data. Removing item G5 can increase the reliability coefficient, suggesting that this item may need revision or deletion.

Table 1 Cronbach's reliability analysis

Name	Correction term correlation (CITC)	totalThe alpha coefficient deleted item	of the Cronbach alpha coefficient
A1	0.737	0.980	
A2	0.772	0.980	
A3	0.766	0.980	
A4	0.807	0.980	
A5	0.789	0.980	
A6	0.769	0.980	
B1	0.759	0.980	
B2	0.738	0.980	
В3	0.787	0.980	
B4	0.796	0.980	0.980
B5	0.805	0.980	0.900
C1	0.802	0.980	
C2	0.815	0.980	
C3	0.808	0.980	
C4	0.820	0.980	
C5	0.768	0.980	
D1	0.827	0.980	
D2	0.756	0.980	
D3	0.810	0.980	
D4	0.797	0.980	



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Name	Correction term correlation (CITC)	totalThe alpha coefficien deleted item	nt of the Cronbach alpha coefficient
D5	0.757	0.980	
E1	0.812	0.980	
E2	0.821	0.980	
E3	0.844	0.979	
E4	0.796	0.980	
E5	0.833	0.980	
F1	0.761	0.980	
F2	0.805	0.980	
F3	0.671	0.980	
F4	0.686	0.980	
G1	0.693	0.980	
G2	0.692	0.980	
G3	0.716	0.980	
G4	0.668	0.980	
G5	-0.279	0.982	
H1	0.647	0.980	
H2	0.697	0.980	
Н3	0.711	0.980	
H4	0.706	0.980	
H5	0.647	0.980	

Standardized Cronbach alpha coefficient: 0.980

3. Questionnaire validity analysis

Validity analysis is conducted using factor analysis to assess the reasonableness and meaningfulness of the research items. The commonalities of all items are above 0.4, indicating effective information extraction. The KMO measure is 0.974, indicating the data can be effectively utilized. The explained variances of the four factors are above 50%, indicating effective information extraction.

Table2 Results of Validity Analysis

NT	Factor lo	ading factor	Commonality			
Name	Factor 1	Factor 2	Factor 3	Factor 4	-(common facto variance)	factor
Eigenroot value (before rotation)	23.640	3.240	1.672	1.211	-	
Variance explained % (before rotation)	ore 59.100%	8.100%	4.180%	3.027%	-	



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	Factor lo	Commonality				
Name	Factor 1	Factor 2	Factor 3	Factor 4	—(common variance)	factor
Cumulative variance explained (before rotation)	[%] 59.100%	67.199%	71.379%	74.407%	-	
Eigenroot value (after rotation)	11.348	8.725	7.273	2.416	-	
Eigenroot value (after rotation)	28.370%	21.813%	18.183%	6.041%	-	
Cumulative variance explained (after rotation)	[%] 28.370%	50.183%	68.366%	74.407%	-	
KMO value	0.974				-	
Barth Spherical Value	22467.024	4			-	
df	780				-	
p-value	0.000				-	

4. Measurement model reliability testing

The standardized loadings of all items are above 0.6 and significant, indicating a robust measurement relationship. The AVE values for all factors are above 0.5 and the CR values are above 0.7, indicating good convergent validity. Discriminant validity varies among factors.

5. Correlation analysis

Correlation analysis shows a significant positive relationship between "Athletic Skills" and the seven factors: "Physical Fitness", "Exercise Methods", "Referee Knowledge", "Protection Knowledge", "Commodity Sports Consumption", "Participation Sports Consumption", and "Spectator Sports Consumption".

Table3 Summary table of model regression coefficients: Pearson Related - Detailed Format

Variable		Sports skills	Physical fitness	Exercise methods	Referee knowledge	Sports protection	Sports consumption of goods	sports	ngOrnamental sports n consumption
Sports skills	Correlation coefficient	1							
	p-value								
Physical	Correlation coefficient	0.869**	1						
fitness	p-value	0.000							
Exercise methods	Correlation coefficient	0.852**	0.835**	1					
	p-value	0.000	0.000						
Referee	Correlation coefficient	0.708**	0.680**	0.764**	1				
knowledge	p-value	0.000	0.000	0.000					
Sports	Correlation coefficient	0.722**	0.704**	0.785**	0.897**	1			
protection	p-value	0.000	0.000	0.000	0.000				
Sports consumption	Correlation coefficient	0.653**	0.614**	0.722**	0.807**	0.850**	1		
of goods	p-value	0.000	0.000	0.000	0.000	0.000			
Participating sports	Correlation coefficient	0.555**	0.516**	0.640**	0.700**	0.721**	0.880**	1	
consumption	p-value	0.000	0.000	0.000	0.000	0.000	0.000		
	Correlation coefficient	0.681**	0.668**	0.707**	0.721**	0.719**	0.747**	0.713**	1



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Variable		Sports skills		Exercise methods	Referee knowledge	Sports protection	Sports consumption of goods	ParticipatingOrnamental sports sports consumption consumption
Ornamental sports consumption	p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000
* p<0.05 ** p	< 0.01							

6. Model validation analysis results

To further analyze whether the hypothesis of path relationship in the theoretical model of influencing factors of sports consumption of college students in Guangzhou is tenable, this paper uses the path analysis function of AMOS21.0 statistical software, estimates the relevant parameters with the "Maximum likelihood estimation method", analyzes the simulation path and explanatory ability of the research model, and verifies the causal relationship between the potential variables by estimating the path coefficient of the model and testing the significance.

Table4 Model Fitting Metrics

Commonly used indicators	χ^2	df	р	Cardinality Ration of Freedom χ²/df	GFI RMSE	ARMR	CFI NFI	NNFI
Judgment Criteria	-	-	>0.0<	5<3	>0.9 <0.10	< 0.05	>0.9 >0.9	>0.9
Value	1331.32	4668	0.603	31.993	0.9080.008	0.006	0.9610.940	0.935
Other indicators	TLI	AGF	FIIFI	PGFI	PNFISRMR	RMSEA 90% CI		
Judgment Criteria	>0.9	>0.9	>0.9	>0.9	>0.9 <0.1	-		
Value	0.935	0.94	20.962	20.921	0.9670.004	0.115 0.134	~	
Default Mod	el: $\gamma^2 (741)$) = 23	8098.8	46. <i>p</i> =1.000	•			

Table 5 Model Fit R 2 Summary Table Form

Model Fit R ² Summary Table Form					
Item	R Square value				
Sports skills	0.767				
Physical fitness	0.686				
Referee knowledge	0.694				
Exercise methods	0.605				
Sports protection	0.621				
Sports consumption of goods	0.930				
Participating sports consumption	0.633				
Ornamental sports consumption	0.402				
Sports consumption	0.000				



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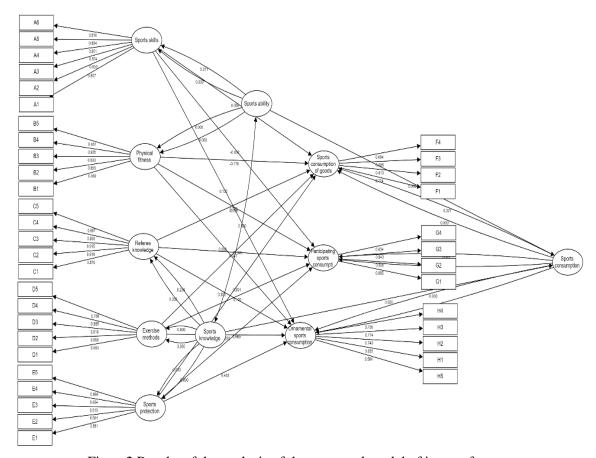


Figure 2 Results of the analysis of the structural model of impact factors

In path analysis, first based on the path assumption of the theoretical model, a structural model of the influencing factors of sports consumption among college students in Guangzhou is drawn. Then, through the path analysis function of AMOS, 487 valid sample data are imported for path coefficient estimation and significance testing. The estimated results of the relevant parameters are shown in Table.

The analysis results indicate that the structural model of the influencing factors of online education platform users' intention to continue using has good adaptability, that is, the theoretical assumed path relationship is in good agreement with actual measurement data, and the construction and assumption of the structural model are relatively ideal.

Table6 Research hypothesis testing results

Path relationships	Standardized regression coefficients	Significant level (p-value))	Significance test	Hypothesis testing results
H1a	-0.176<0	p=0.000<0.05	Significant	Established
H1b		p=0.155>0.05	Not significant	Not Established
H1c	-0.231<0	p=0.000<0.01	Significant	Established
H2a	0.056>0	p=0.029<0.05	Significant	Established
H2b	0.130>0	p=0.002<0.01	Significant	Established
H2c		p=0.107>0.05	Not significant	Not Established
Н3а	0.226>0	p=0.000<0.01	Significant	Established
H3b	0.303>0	p=0.026<0.05	Significant	Established
Н3с	0.347>0	p=0.000<0.01	Significant	Established
H4a	0.168>0	p=0.000<0.01	Significant	Established
H4b	0.292>0	p=0.000<0.01	Significant	Established
H4c	0.120>0	p=0.000<0.01	Significant	Established
H5a	0.904>0	p=0.000<0.01	Significant	Established



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Path relationships	Standardized regression coefficients	Significant level (p-value))	Significance test	Hypothesis testing results
H5b	0.435>0	p=0.010<0.01	Significant	Established
H5c	0.407>0	p=0.000<0.01	Significant	Established

Conclusion

This study found that physical fitness, sports skills, referee knowledge, exercise methods, and sports protection all have significant impacts on different aspects of college students' sports consumption. Physical fitness negatively influences sports goods consumption and participation in sports consumption. Sports skills positively influenced sports goods consumption and ornamental sports consumption. Referee knowledge positively influenced all three types of sports consumption. Exercise methods and sports protection also had positive impacts on all three types of sports consumption.

Discussion

The existing research in this field is limited, with a scarcity of quantitative empirical investigations. Prior studies by Bao Mingxiao (2005), Chen Xiujuan (2009), and Xiaojuan, J. (2020) explored the influence of physical fitness, skills, and sports knowledge on sports consumption but lacked empirical quantification.

Our study's findings offer intriguing insights. Referee knowledge, exercise methods, and sports protection exhibit positive correlations with ornamental sports consumption, sports consumption of goods, and participating sports consumption. These results align with Bao Mingxiao (2005), Chen Xiujuan (2009), and Xiaojuan, J. (2020), underscoring the significance of these factors across diverse sports consumption dimensions.

However, our conclusions deviate from prior research. While we observe a positive relationship between sports skills and sports consumption of goods and ornamental sports consumption, our findings differ from Bao Mingxiao (2005), Chen Xiujuan (2009), and Xiaojuan, J. (2020) in terms of the impact of sports skills on participating sports consumption. This variance underscores the intricate interplay of contextual elements that influence the role of sports skills in distinct dimensions of sports consumption. Surprisingly, our study reveals a negative association between physical fitness and sports consumption of goods, as well as its negative impact on participating sports consumption. This contradicts the perspectives of Bao Mingxiao (2005), Chen Xiujuan (2009), and Xiaojuan, J. (2020), highlighting the intricate nature of the relationship between physical fitness and specific sports consumption dimensions.

Conversely, the conclusion that sports skills have no significant influence on participating sports consumption differs from Bao Mingxiao (2005), Chen Xiujuan (2009), and Xiaojuan, J. (2020). These disparities could stem from differences in methodologies, sample characteristics, or evolving research contexts.

In conclusion, our study's exploration of these disparities underscores the nuanced character of sports consumption factors. The interplay between individual attributes, contextual factors, and evolving societal dynamics contributes to diverse outcomes, enriching our comprehension of the intricate landscape of sports consumption influences.

Recommendations

- 1. Explore Sports Skills Dimensions: Further investigate how different dimensions of sports skills impact various types of sports consumption.
- 2. Study Physical Fitness and Consumption Relationship: Examine the relationship between physical fitness and diverse aspects of sports consumption, along with the underlying factors.
- 3. Consider Cultural and Regional Factors: Extend research to different regions and cultures to understand how they influence sports consumption factors.
- 4. Examine Changing Consumption Behavior Factors: Analyze how societal and technological changes shape sports consumption factors and trends.
- 5. Integrate Quantitative and Qualitative Approaches: Combine quantitative and qualitative methods to gain deeper insights into the motivations behind influencing factors.





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In summary, pursuing these recommendations will provide a more nuanced understanding of sports consumption influencing factors and offer practical insights for decision-making.

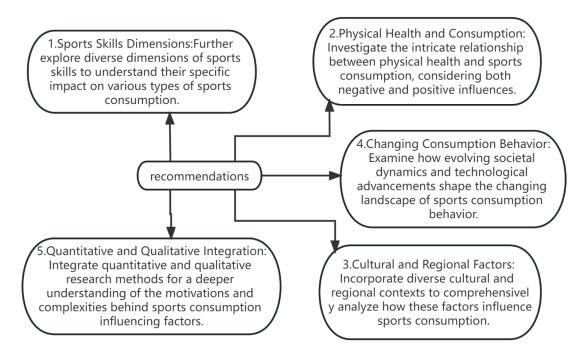


Figure3 suggestion diagram

References

- Bao, M. (2019). Implement the "Outline of Building a Powerful Sports Country" and do a good job in sports that the people are satisfied with. *Sports Science*. (9), 3-23. doi:10.16469/j.css.201909001.
- Becker, G.S. (1965) A Theory of the Allocation of Time. *Economic Journal*, 75, 493-517. http://dx.doi.org/10.2307/2228949
- Chen, X. (2009). Research on the nature and supply mechanism of mass sports in my country. *Sports Science*. (1), 85-91. doi 10.16469/j.css.2009.01.012.
- Couder, J., & Kesenne, S. (1990). The economic impact of sport in Flanders. *Sport Science Review*.13, 60-63.
- Eakins, J. (2016). An application of the double hurdle model to petrol and diesel household expenditures in Ireland. *Transport Policy*. 47, 84-93. https://doi.org/10.1016/j.tranpol.2016.01.005
- Grossman, M. (1972) On the Concept of Health Capital and the Demand for Health. *Journal of Political Economy*, 80, 223-255.http://dx.doi.org/10.1086/259880
- Pawlowski T., Downward, P., & Rasciute, S. (2011). Subjective well-being in European countries—on the age-specific impact of physical activity. *Eur. Rev. Aging Phys. Activity*, 8, 93–102. Doi: 10.1007/s11556-011-0085-x
- Wang, Y., Zhang, Z., & Lou, C., (2019). *Sports industry investment monitoring report*. Report on the Development of the Sports Industry of China. Li, Yingchuan, ed. Blue Book of Sports: Social Sciences Academic Press.
- Xiaojuan, J. (2020). Development of the Sports Industry: New Opportunities and Challenges. Contemporary Social Sciences. 4, 2. Available at: https://css.researchcommons.org/journal/vol2020/iss4/2
- Zhong, T. (2004). Introduction of Sports Economics. Fu Dan University Press.

