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Research on the Behavioral Characteristics and Influencing Factors of Consumer Groups in Pickleball Clubs of a Prefecture-level City

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ABSTRACT

Pickleball is an emerging net sport that integrates fitness, recreation, and social interaction. Compared with many traditional racket sports, it is easier for beginners to learn, requires a moderate activity range, and is suitable for experience classes, doubles play, and graded instruction in commercial clubs. With the continuous development of national fitness and sports consumption, some clubs in prefecture-level cities have introduced pickleball programs. However, these clubs still face problems such as limited public awareness, insufficient member retention, unclear course design, and homogeneous activities. Taking consumers from five clubs, including Huoli, Jianxiang, and Xinrui, as the research subjects, this study applies literature review, questionnaire survey, interview, and mathematical statistics to analyze demographic characteristics, consumption behavior, participation behavior, and satisfaction evaluation. The results show that the current consumers are mainly young and middle-aged males aged 26–40. Pay-per-use consumption accounts for the largest proportion, while a stable membership group has not yet been fully formed. Consumers mainly give “average” evaluations for venue facilities, service quality, and pricing. The factors influencing consumption behavior include sport interest, fitness and social needs, willingness to pay, skill level, venue conditions, equipment supply, coaching service, price level, transportation convenience, and community atmosphere. Accordingly, clubs should improve pickleball-specific venues and equipment, provide introductory and graded courses, design flexible membership packages, and organize more matches, partner-matching activities, and online communities so as to enhance participation, retention, and the sustainable development of local sports consumption.

1. Introduction

Pickleball is an emerging net sport that integrates fitness, recreation, competition, and social interaction. Compared with traditional racket sports, it is easier for beginners to learn and requires moderate activity [13]. Its popularity has been highlighted in academic trend analyses [7] and

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supported by international participation studies [3]. In China, pickleball aligns with national fitness initiatives and broader health strategies [10,16].

1. Research Objects and Methods

1.1 Research Objects

This study takes consumers from five clubs, including Huoli Pickleball Club, Jianxiang Pickleball Club, and Xinrui Pickleball Club in a prefecture-level city, as the research objects. The selected clubs cover two typical locations: core urban business districts and areas near communities. They include both experience-oriented venues with relatively affordable prices and quality-oriented venues with better facilities, which can reasonably reflect the basic situation of consumer groups in pickleball clubs in a prefecture-level city [9,11].

1.2 Research Methods

1.2.1 Literature review

Relevant literature on pickleball promotion, club operation, sports consumption behavior, and consumer behavior was retrieved from databases such as CNKI and Wanfang Data. Materials on sports economics and mass sports were also consulted to establish the theoretical foundation of this study. During the literature review, special attention was paid to recent research findings on emerging sports, urban residents' sports consumption, and club membership operation. In combination with the characteristics of pickleball, such as a low entry threshold, strong social interaction in doubles play, and relatively controllable venue renovation costs, the literature review provided support for the subsequent questionnaire design and result analysis [2,13].

1.2.2 Questionnaire survey

Based on the research content, the Questionnaire on the Behavioral Characteristics of Consumer Groups in Pickleball Clubs of a Prefecture-level City was designed and randomly distributed to consumers in five clubs. A total of 300 questionnaires were distributed, 278 were collected, and 265 were valid, with a recovery rate of 92.7% and an effective rate of 95.3%. The questionnaire was reviewed and revised by three experts in the field of the sports industry. It covered four dimensions, namely demographic information, consumption behavior, participation behavior, and satisfaction, with a total of 28 items. The reliability and validity tests met the required standards [1,8].

1.2.3 Interview method

Focusing on the behavioral characteristics and influencing factors of consumers in pickleball clubs in a prefecture-level city, interviews were conducted with the operators and coaches of five clubs as well as 10 experienced consumers. The interviews mainly explored program operation modes, course fees, consumers' participation motives, venue use, and difficulties in market promotion. A semi-structured interview format was adopted. An interview outline was prepared in advance, each interview lasted 20–30 minutes, and the whole process was recorded and summarized into 15 interview notes [3,5].

1.2.4 Mathematical statistics

Excel was used to organize the valid questionnaire data, and SPSS was used for descriptive statistical analysis, thereby providing data support for the research results. Frequency and percentage statistics were mainly conducted, and mean analysis was performed on satisfaction data to ensure that the data results truly reflected the actual situation of the sample [13].

2. Research Results and Analysis

2.1 Analysis of the Behavioral Characteristics of Consumer Groups in Pickleball Clubs of a Prefecture-level City

2.1.1 Demographic characteristics

Table 1

Demographic characteristics of consumer groups in pickleball clubs of a prefecture-level city

Characteristic dimension	Category	Number	Percentage
Gender	Male	159	60%
	Female	106	40%
Age	18-25 years old	53	20%
	26-40 years old	133	50.2%
	41-55 years old	65	24.5%
	Over 55 years old	14	5.3%
Occupation	Enterprise employee	93	35.1%
	Self-employed individual	62	23.4%
	Civil servant	45	17%
	Student	38	14.3%
	Other	27	10.2%

From the perspective of gender distribution, male consumers account for a higher proportion than female consumers. Considering that pickleball is still an emerging sport in prefecture-level cities, the earliest participants are mostly people with a foundation in ball games [2,4]. Therefore, the relatively high proportion of males has a certain practical rationality. The relatively low proportion of females also indicates that clubs are not yet sufficiently detailed in course design and promotional scenarios. For example, there is still room to develop female-friendly time slots, light fitness courses, and experience activities for relatives and friends [5].

From the perspective of age distribution, young and middle-aged consumers aged 26–40 are the main consumer group. This group has relatively stable income, is willing to try emerging sports, and is more likely to learn about the sport through social media and acquaintances' recommendations [12,15]. The proportions of consumers aged 41–55 and over 55 are not high, which is related to insufficient awareness of the sport and insufficient supply of daytime courses and low-intensity instruction [3,13].

From the perspective of occupational distribution, enterprise employees, self-employed individuals, and civil servants account for a total of 75.5%, indicating that groups with relatively regular schedules and strong health awareness are currently the easiest customer sources for clubs to convert.

2.1.2 Consumption behavior characteristics

Table 2

Consumption behavior characteristics of consumer groups in pickleball clubs of a prefecture- level city

Consumption dimension	Category	Number	Percentage
Consumption type	Pay-per-use card	106	40%
	Monthly card	53	20%
	Quarterly card	43	16.2%
	Annual card	63	23.8%
Single-session consumption amount	20-30 yuan	87	32.8%
	31-50 yuan	124	46.8%
	More than 51 yuan	54	20.4%

From the perspective of consumption type, consumers using pay-per-use cards account for the highest proportion, indicating that many consumers are still in the stage of “trying first and then deciding,” and their participation is somewhat temporary [6,15]. Annual card consumers account for 23.8%, indicating that a certain stable group has already formed, but its scale is still insufficient to support the long-term operation of clubs [14]. For pickleball clubs, a high proportion of pay-per-use card consumers is not entirely negative. It reflects the sport's ability to attract new customers to try it [2,4]. The problem lies in the lack of follow-up beginner advancement courses, partner-matching organization, and membership benefits, which makes it difficult for trial users to settle into long-term customers [3,5].

From the perspective of single-session consumption amount, the 31–50 yuan range accounts for the highest proportion, which generally conforms to the acceptable level of sports consumption in prefecture-level cities [12,13]. Interviews also found that while consumers are price-sensitive, they pay more attention to whether additional services such as paddle use, balls, rule explanations, partner matching, and coaching guidance are included [10,16].

2.1.3 Participation behavior characteristics

Table 3

Participation behavior characteristics of consumer groups in pickleball clubs of a prefecture- level city

Participation dimension	Category	Number	Percentage
Participation frequency	Once per week	119	44.9%
	2-3 times per week	93	35.1%
	More than 4 times per week	53	20%
Participation time period	Weekday evening	146	55.1%
	Weekend daytime	92	34.7%
	Holidays	27	10.2%
Participation companion	With friends	133	50.2%
	With family members	59	22.3%
	Alone	73	27.5%

From the perspective of participation frequency, people participating once a week account for the highest proportion, while the relatively stable group participating two to three times per week accounts for 35.1%. These two groups together account for 80%, indicating that pickleball already has a certain basis for repeated participation among the sample group, but high-frequency training-oriented consumption has not yet been formed.

From the perspective of participation time, weekday evenings are the main time period, which is consistent with office workers' habit of exercising after work [5,12]. Weekend daytime participation ranks second, while participation on holidays is relatively low, which is related to insufficient holiday-themed activities and inflexible venue arrangements [10,16].

From the perspective of participation companions, participation with friends accounts for the highest proportion, indicating that the doubles experience, interactivity, and social atmosphere of pickleball are important reasons for attracting consumers to participate continuously [2-5].

2.1.4 Satisfaction evaluation characteristics

Table 4

Satisfaction evaluation characteristics of consumer groups in pickleball clubs of a prefecture-level city

Evaluation dimension	Satisfaction level	Number	Percentage
Venue facilities	Satisfied	89	33.6%
	Average	137	51.7%
	Dissatisfied	39	14.7%
Service quality	Satisfied	76	28.7%
	Average	152	57.3%
	Dissatisfied	37	14%
Charging standards	Satisfied	68	25.7%
	Average	161	60.8%
	Dissatisfied	36	13.5%

From the perspective of satisfaction evaluation, more than 50% of consumers rated venue facilities, service quality, and charging standards as “average,” while the proportion of “satisfied” ratings was below 35% in each dimension. Dissatisfaction mainly focused on general ventilation and lighting conditions, insufficiently clear dedicated court lines, insufficiently standardized net height and equipment configuration, insufficient explanation of rules and tiered teaching by coaches, and mismatch between price and service content [10,16].

This shows that pickleball clubs in prefecture-level cities do not simply lack consumers; rather, they have not fully kept up with the development needs of the sport in terms of experience conversion and service details. If these problems persist, they will affect word-of-mouth communication and reduce the possibility of converting trial users into members [3,5].

2.2 Main Factors Influencing the Behavior of Consumer Groups in Pickleball Clubs of a Prefecture-level City

2.2.1 Subjective factors

First, sport interest, fitness needs, and novelty. The rules of pickleball are relatively easy to understand, and doubles play involves frequent communication, enabling beginners to gain a sense of participation within a short period of time [2,4]. Some consumers initially try the sport because it is “new” and “fun,” and then gradually develop needs for fitness, stress relief, and social interaction [5,13]. Interest is the entry point into the sport, while continuous experience and a sense of physical benefit are important reasons for maintaining participation [3].

Second, consumption concepts and willingness to pay. Young and middle-aged consumers show a relatively high acceptance of experience-based sports consumption and are willing to pay for health, entertainment, and social interaction [6,15]. Some middle-aged and elderly consumers pay more attention to whether the price is affordable, whether the courses are safe, and whether the exercise intensity suits their physical condition. Different age and income groups differ in payment

preferences, which determines that clubs should not rely on a single charging model. Instead, they should offer multiple options such as experience cards, family-and-friend cards, daytime discount cards, course packages, and membership points [14].

Third, skill mastery and participation confidence. Although pickleball is relatively easy to learn at the entry level, serving, volleying, ball control, positioning, and doubles cooperation still require a certain learning process. Consumers with higher skill levels are more likely to gain a sense of achievement and are more willing to purchase courses or participate in competitions [2,4]. Beginners may lose the willingness to participate again if they cannot understand the rules during their first experience, cannot find partners, or make frequent mistakes. Therefore, lowering the entry threshold and providing beginners with clear rule explanations and practice partner support are key to improving retention [3,5].

2.2.2 Objective factors

First, venue equipment and service level. Pickleball has clear experiential requirements for court lines, net height, floor anti-slip performance, lighting, paddles, and balls. Unclear court boundaries, aging equipment, and an insufficient number of paddles can directly affect consumers' first impressions [10,16]. At the same time, whether coaches can explain rules in plain language, whether they can teach in groups according to skill level, and whether the front desk can assist with partner matching and court scheduling also influence consumers' judgment of the club's professionalism.

Second, charging standards and cost performance. Residents in prefecture-level cities tend to be relatively rational in sports consumption, and consumers usually compare prices together with venue conditions, equipment rental, coaching guidance, and community activities [12,15]. If the fees are high but the service content is thin, it is difficult to convert trial consumers into long-term members. Conversely, if trial classes, basic instruction, partner matching, and competition activities can be packaged together, consumers are more likely to accept the service even if the single-session price is slightly higher [13].

Third, leisure time and transportation convenience. Consumers' leisure time directly affects participation frequency. Weekday evenings and weekends are the main consumption periods [12, 15]. If a venue is located far away, parking is inconvenient, or the reservation process is complicated, participation costs will increase. For emerging sports, consumers have not yet formed strong dependence. Once transportation and time costs become too high, they may turn to other more familiar sports [10,16].

Fourth, social atmosphere and peer influence. The spread of pickleball often relies on acquaintances and community diffusion. Participation with friends, colleagues, and family members can lower the psychological threshold for the first experience and increase the probability of repurchase [2,4]. Clubs can organize small round-robin matches, graded exchange competitions, family-and-friend experience days, and online partner-matching groups to help consumers shift from "trying once" to "coming regularly." A good community atmosphere is an important support for low-cost customer acquisition and long-term retention [3,5].

3. Conclusions and Suggestions

3.1 Conclusions

First, consumers in pickleball clubs in prefecture-level cities are mainly young and middle-aged males aged 26–40, with occupations concentrated among enterprise employees, self-employed individuals, and civil servants. This group has a certain level of consumption capacity and willingness

to try emerging sports [12,15] but the proportions of females, adolescents, and middle-aged and elderly people are relatively low, indicating that the customer structure of clubs still needs to be further expanded [2,4].

Second, consumers mainly use pay-per-use cards, and the proportion of stable members is relatively insufficient. Participation frequency is mostly once per week, and participation time is concentrated in weekday evenings. The high proportion of participation with friends shows that the social attributes of pickleball have already emerged [3,5], but clubs still need to transform temporary experiences into continuous participation through courses, competitions, and community activities.

Third, consumers' overall satisfaction with clubs is at a moderate level, and the main problems are concentrated in venue facilities, service quality, and charging standards. In particular, the standardization of dedicated venues and equipment, coaches' ability to conduct tiered teaching, and the match between price and service content are important factors affecting consumer evaluation [10,16].

Fourth, the factors influencing consumer behavior include both subjective and objective aspects. Subjective factors mainly include sport interest, fitness and social needs, consumption concepts, and skill mastery [1,8]. Objective factors mainly include venue equipment, coaching services, charging standards, transportation and time costs, and community atmosphere [12,13]. The interaction of these two aspects jointly affects consumers' first trial, repurchase willingness, and membership retention.

3.2 Suggestions

First, optimize pickleball venue equipment and basic services. Clubs should improve dedicated court lines, net height, lighting, ventilation, and anti-slip conditions as soon as possible, and provide sufficient quantities of paddles and balls with stable quality [10,16]. For venues renovated from other types of courts, safety distance, sideline identification, and venue reminders should be made clearer. At the same time, coach training and service evaluation should be strengthened to improve coaches' abilities in rule explanation, beginner guidance, tiered teaching, and activity organization [2,4].

Second, formulate more flexible pricing and membership strategies. Differentiated packages should be launched for different groups, such as beginner experience cards, student discount cards, family-and-friend companion cards, daytime discount cards, course packages, and annual-card benefit packages. Membership benefits should not be limited to price discounts. They may also include free equipment rental, priority reservation, point redemption, competition registration discounts, and coaching evaluations, making consumers feel that "staying is more cost-effective," thereby improving membership conversion and stickiness [13].

Third, enrich activity forms and lower the threshold for beginners. Clubs can regularly organize beginner experience classes, rule explanation classes, doubles pairing activities, graded friendly matches, and small point-ranking competitions [3,5]. It is recommended to hold one small exchange competition and two beginner experience classes each month, and to establish online partner-matching communities to release information on court sessions, courses, and activities. Grouping consumers by skill level can reduce beginners' frustration and also allow consumers with a foundation to obtain a fuller competitive experience [13].

Fourth, strengthen publicity, promotion, and market expansion. Clubs can use short-video platforms, local life-service platforms, and community publicity to display the characteristics of pickleball, venue environment, experience courses, and activity atmosphere [7]. They can also cooperate with surrounding enterprises, schools, and communities to conduct experience activities and expand awareness of the sport [9,11]. For females, middle-aged and elderly people, parent-child

families, and corporate team-building groups, clubs can design light fitness courses, daytime health classes, parent-child experience classes, and team challenge competitions, respectively, so as to gradually build a locally recognizable pickleball sport brand [10].

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