

THE INFLUENCE OF PERCEIVED VALUE, EVENT QUALITY AND SERVICE QUALITY ON CUSTOMER LOYALTY: A CASE STUDY OF ELDERLY SPORTS ASSOCIATION IN HENAN PROVINCE, CHINA

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Abstract

This study investigates the impact of perceived value, activity quality, and service quality on customer loyalty in the Elderly Sports Association of Henan Province, China, to better understand the loyalty drivers for this group. The study collected data from 320 elderly members through questionnaires, assessing perceived value, event quality, service quality, and customer loyalty. Using structural equation modeling, the results show that activity quality, perceived value, and service quality significantly enhance customer loyalty, with perceived value having the greatest impact on customer loyalty. Activity quality also has a positive effect on perceived value. However, the scope of this study is limited to Henan Province, and the sample size is relatively small, indicating the need for further research in more diverse regions and with larger sample sizes. In practice, the results suggest that elderly sports associations should focus on improving event and service quality to enhance perceived value and service quality, thereby increasing customer loyalty. This study adds new content to the existing literature on elderly sports service management in China and provides rare empirical insights into the factors driving customer loyalty in this specific context.

1. INTRODUCTION

In an era marked by demographic changes and the global aging of the population, the physical and mental health of the elderly has become increasingly crucial. Maintaining active engagement in sports and social activities has emerged as a key to enhancing the quality of life for the elderly (Yang, W., Guan, C., & Wu, K. (2022)). Recognizing this need, Elderly Sports Associations have been established as vital organizations, providing platforms for older adults to participate in sports, physical activities, and social events.

The Henan Provincial Elderly Sports Association is one such organization, playing a critical role in promoting the physical, mental, and social well-being of elderly individuals in the region. It offers a variety of sports activities, services, and events tailored to the unique needs and interests of its members (Hu jiangyi, 2018). These activities include sports training and competitions, as well as social gatherings and cultural events.

As the aging population continues to grow, such organizations become increasingly important in promoting the health and welfare of the elderly. Enhancing customer perceived value, service quality, and event quality is essential for increasing loyalty. However, research, particularly on the drivers of customer loyalty in Chinese Elderly Sports Associations, remains limited. This study aims to fill this research gap by investigating the impact of customer

perceived value, service quality, and event quality on customer loyalty in the Henan Provincial Elderly Sports Association. To this end, we have adopted a comprehensive theoretical framework that combines the Service Quality Model (SERVQUAL) (Parasuraman et al., 1988) and Customer Perceived Value Theory (Zeithaml, 1988), integrated with the research on event quality by Yoshida and James (2010).

This framework will help us to deeply understand how the services, activities, and events provided by the Henan Provincial Elderly Sports Association influence the loyalty of its members. Through this theoretical framework, the study aims to provide a deeper understanding of strategies to enhance customer loyalty in the Henan Provincial Elderly Sports Association and offer valuable references for similar organizations globally.

2. LITERATURE REVIEW

2.1 Customer Loyalty

Customer loyalty, as defined by Dick & Basu (1994) and Oliver (1999), involves both attitudinal and behavioral dimensions, including emotional attachment to a brand and repurchase likelihood. In sports management, loyalty is influenced by service quality and customer satisfaction (Avolio D'Adamo et al., 2014; García-Pascual et al., 2023). For elderly sports associations, loyalty encompasses emotional attachment, spiritual identity, and behavioral loyalty, reflecting members' affinity and commitment to the association's activities and values.

2.2 Service Quality

Service quality, pivotal in sports and leisure services, directly impacts customer satisfaction and loyalty (Alexander et al., 2017; Avourdiadou & Theodorakis, 2014; Meyer and Schwager, 2007). High service quality in elderly sports services increases perceived value and customer satisfaction, thereby enhancing loyalty (Yu et al., 2014; Chai Weiqi, 2023).

2.3 Event Quality

Event quality in sports, encompassing organizational management, atmosphere, and supporting facilities, significantly contributes to loyalty (Kelley & Turley, 2001; Yoshida & James, 2010). Studies show a positive correlation between event quality and both emotional and behavioral loyalty (Li Haiyou, 2019; Zhang, 2017).

2.4 Perceived Value

Perceived value, reflecting customers' subjective evaluation of a product or service's benefits and costs (Zeithaml, 1988), is critical in the sports service sector. It influences loyalty directly or indirectly through satisfaction (Cronin et al., 2000; Li & Petrick, 2010;

Howat & Assaker, 2013). In the elderly sports context, perceived value relates to enhancements in life quality through sports participation.

3. METHODOLOGY

3.1 Research Design

This study employed a mixed-methods research design to achieve a comprehensive understanding of the investigated phenomena. Initially, a systematic literature review was conducted to establish the theoretical framework. Subsequently, quantitative data were collected through surveys administered to members of the Henan Province Elderly Sports Association, aiming to analyze the relationships between perceived value, event quality, service quality, and customer loyalty. Finally, focus group interviews were conducted to delve deeper into key themes identified from the survey, thus enriching and validating the quantitative findings.

3.2 Research Population and Sample

The participants of this study were members of the Henan Province Elderly Sports Association. A stratified random sampling technique was utilized, resulting in 320 valid questionnaires. For the qualitative phase, 18 survey participants were selected to form three focus groups, ensuring the representativeness and diversity of the sample. Informed consent was obtained from all participants prior to the study, and confidentiality was strictly maintained throughout the research process.

3.3 Research Analysis

Quantitative data analysis was conducted using Structural Equation Modeling (SEM) software AMOS 26.0 to test research hypotheses and examine the relationships among variables. To ensure the reliability and validity of the survey instrument, a pilot test was conducted, and scales were developed based on existing literature, encompassing multiple dimensions of each construct. Reliability and validity were assessed using Cronbach's Alpha, test-retest reliability, content validity, and construct validity. Qualitative data from the focus group interviews were analyzed using thematic analysis to code and interpret the content, providing depth to the quantitative results.

4. RESULTS

4.1 Descriptive Statistics

This study collected 320 valid questionnaires from members of the Elderly Sports Association in Henan Province. The distribution of demographic variables includes gender, age, educational level, and duration of membership.

The data shows that in terms of gender, males constitute 61.3% and females 38.8%, reflecting a distribution consistent with the national gender ratio in China. Regarding age distribution, the highest proportion is in the 60-65 age group (49.1%), followed by 55-60 years (21.9%) and 65-70 years (24.7%).

A smaller proportion of the participants are aged 70 and above (4.4%), indicating that the study's sample has a higher representation of people aged 60-70. In terms of educational level, the majority of participants have an education of high school or below (65.3%). Additionally, 82.2% of the participants have been members of the association for 5 years or less, suggesting that most respondents have a relatively short membership duration in the association.

Table 1: Consolidated Descriptive Statistics of Study Variables

Variables	Mean	Standard Deviation	Min Value	Max Value	Skewness	Kurtosis
Sports Event Quality	4.94	1.484	1	7	-0.891	0.517
Sports Service Quality	5.07	1.379	1	7	-0.942	0.775
Perceived Value	5.15	1.300	1	7	-0.803	0.613
Customer Loyalty	4.81	1.576	1	7	-0.559	-0.725

From Table 1, it is evident that the average scores for all variables are generally high, with perceived value having the highest average score (5.15), followed by sports service quality (5.07). The data for all variables exhibit a slight negative skewness, indicating that most ratings tend to be on the higher side. Particularly in the case of perceived value, its negative skewness is relatively small (-0.803) with a kurtosis of 0.613, suggesting that respondents tend to have a more positive response towards this construct.

4.2 Structural Model Assessment

In this study, Confirmatory Factor Analysis (CFA) was conducted using AMOS 26.0 software to assess the validity of the measurement model. Before conducting the CFA, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity were first carried out to check the suitability of the data for factor analysis.

The model's KMO values ranged from 0.848 to 0.931, and the Bartlett's test of sphericity was significant ($p < 0.001$), indicating that the sample data was highly suitable for factor analysis.

Results for Average Variance Extracted (AVE) and Composite Reliability (CR) were obtained for each measurement construct. All the factor loadings for the measurement items exceeded 0.6, providing strong support for convergent validity. At the same time, the AVE values for all constructs exceeded the standard of 0.5, and CR values were above 0.7, further validating the convergent validity of the measurement model.

Table 2: Path Coefficients between Variables

Regression Paths			β	b	S.E.	CR	p
Perceived value	←	Quality of Sports Events	0.575	0.426	0.062	6.833	***
Perceived value	←	Quality of Sports Services	0.264	0.214	0.063	3.423	***
Customer Loyalty	←	Quality of Sports Services	0.284	0.281	0.091	3.086	0.002
Customer Loyalty	←	Perceived value	0.447	0.598	0.162	3.7	***
Customer Loyalty	←	Quality of Sports Services	0.194	0.211	0.078	2.719	0.007

Note: ***, $P < 0.001$; b: Unstandardized Coefficient; β : Standardized Factor Coefficient

Table 2 provides the path coefficients between the variables, including both standardized and unstandardized coefficients. From the table, it can be observed that:

The path coefficient from sports event quality to perceived value is 0.575, significant at $p < 0.001$. This indicates that sports event quality has a significant positive impact on perceived value. The path coefficient from sports service quality to perceived value is 0.264, significant at $p < 0.001$. This demonstrates that sports service quality significantly positively influences perceived value. The path coefficient from sports event quality to customer loyalty is 0.284, significant at $p = 0.002$. This shows that sports event quality directly affects customer loyalty.

The path coefficient from perceived value to customer loyalty is 0.447, significant at $p < 0.001$. This suggests that perceived value significantly positively influences customer loyalty. The path coefficient from sports service quality to customer loyalty is 0.194, significant at $p = 0.007$. This indicates that sports service quality directly impacts customer loyalty. In summary, the structural equation model supports the research hypotheses, suggesting that there are significant relationships between the variables.

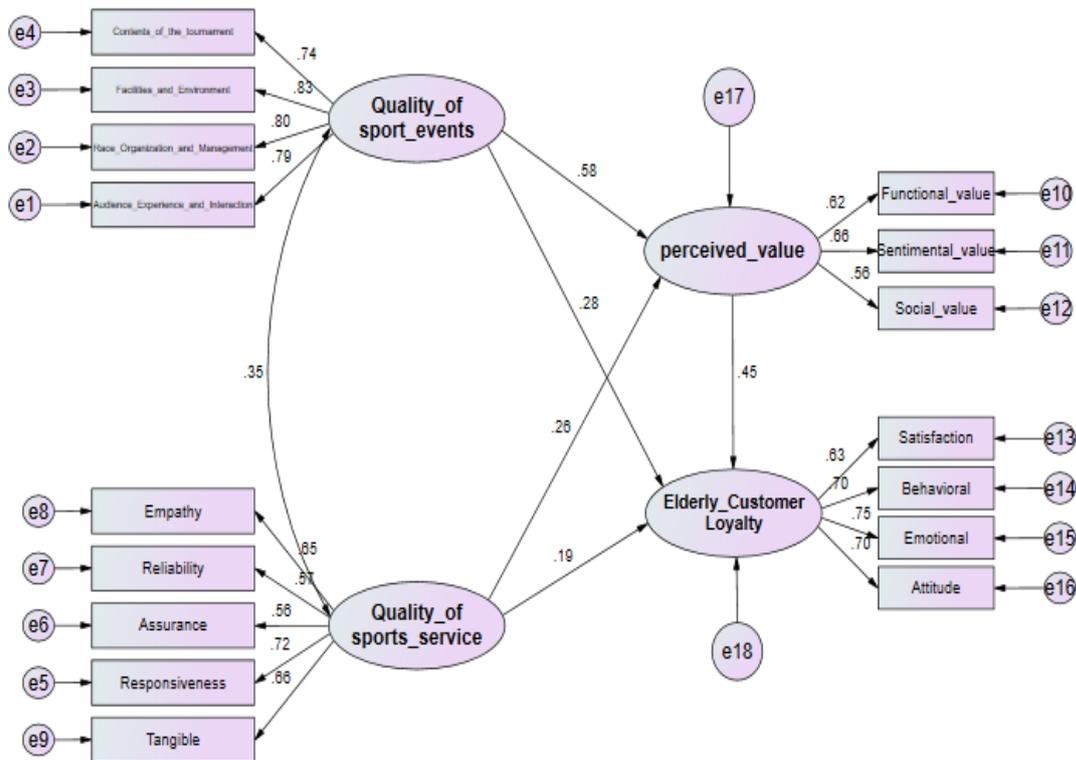


Figure 1: Results of the Structural Equation Model (SEM)

4.3 Hypotheses Testing

According to the results of the path analysis, all hypotheses of this study have been supported. Sports event quality, sports service quality, and perceived value all have a significant positive impact on customer loyalty. Moreover, perceived value plays a mediating role between quality factors and customer loyalty.

Table 3: Mediation Effects

Regression Paths	Decomposition of Effects	Effect Size	SE	Lower limit of 95%	Upper limit of 95%	P
Quality of Sports Events→Customer Loyalty	Mediation Analysis	0.257	0.094	0.117	0.496	0.000
	Direct effect	0.284	0.114	0.042	0.491	0.025
	The total effect	0.054	0.070	0.397	0.670	0.000
Quality of Sports Services→Customer Loyalty	Mediation Analysis	0.118	0.060	0.038	0.275	0.001
	Direct effect	0.194	0.081	0.031	0.351	0.025
	The total effect	0.312	0.067	0.180	0.444	0.000

Table 3 shows the results of the mediation effect analysis. The mediating effect of sports event quality on customer loyalty is 0.257 ($p < 0.001$), the direct effect is 0.284 ($p = 0.025$), and the total effect is 0.541. This indicates that perceived value plays a significant mediating role between sports event quality and customer loyalty. Regarding the relationship between sports service quality and customer loyalty, the mediating effect is 0.118 ($p = 0.001$), the direct effect is 0.194 ($p = 0.025$), and the total effect is 0.312. These results suggest that perceived value also acts as a mediator between sports service quality and customer loyalty.

5. DISCUSSION

5.1 Achievement of Research Objectives

This study aimed to investigate the relationships between perceived value, quality of events, service quality, and customer loyalty within the Henan Province Elderly Sports Association. Employing a mixed-methods approach that combines quantitative and qualitative research techniques, this study not only elucidated the interactions among these variables but also offered practical guidance for elderly sports associations to enhance service optimization, value creation, and cultivation of member loyalty.

5.2 Analysis of the Current Situation in Elderly Sports

In the context of current elderly sports, activities, enhancing service and event, quality, along with augmenting perceived value, is crucial for increasing the loyalty of elderly members. Our findings indicate that high-quality events and services significantly improve elderly participants' experiences, thereby strengthening their loyalty to the sports association. This underscores the importance of designing and providing high quality sports activities and services for the elderly demographic.

5.3 Exploration of Variable Relationships

The quantitative analysis of this research revealed direct and positive impacts of perceived value, quality of events, and service quality on elderly member loyalty. Qualitative inquiry further deepened the understanding of the complex relationships among these variables, particularly highlighting the mediating role of perceived value in the influence of event quality and service quality on member loyalty.

5.4 Recommendations for a Management Model Based on Research Findings

The refined model proposed in this study integrates the key findings, illustrating the direct impact of event and service quality on loyalty, with customer satisfaction serving as a moderating variable. Additionally, incorporating brand image as a latent variable aids in comprehensively understanding the psychological factors leading to member loyalty. Validated by feedback from focus groups, this model provides a detailed framework reflecting the intricate factors affecting the loyalty of elderly members towards sports associations.

6. CONCLUSION

This study provides new insights into the antecedents and nature of customer loyalty in elderly sports associations. Our findings indicate that sports event quality, service quality, and perceived value significantly impact the loyalty of elderly members. Through these results, the study offers practical guidance on how these institutions can optimize service quality, enhance value creation, and cultivate sustainable membership relationships through continuous improvement and innovation. The theoretical contribution of this research lies in enhancing our understanding of the interactions between key concepts within the field of sports service management. In practice, it provides strategies for elderly sports association managers to increase customer loyalty, thereby helping these institutions serve the growing aging population more effectively. However, the study also suggests that more research is needed to further explore the universality and depth of these findings. Future research could be conducted in different cultural and geographical contexts to better understand the dynamics and sustained impact of elderly sports participation. Additionally, a deeper investigation into strategies and operations would aid in establishing a culture of lifelong sports participation among the aging population.

References

- 1) Yang, W., Guan, C., & Wu, K. (2022). The impact of physical exercise on subjective health in the elderly. *Chinese Journal of Health Psychology*, 30(8), 1121-1127. <https://doi.org/10.13342/j.cnki.cjhp.2022.08.001>
- 2) Hu, J. (2018). A study on the development of the sports association for the elderly in Henan Province [Master's thesis, Henan University]. https://kns.cnki.net/kcms2/article/abstract?v=dFlgZ3unFPilmH_EIwhKE27wdMsgFadn9Gty7-BCnFX_qRQy5ialB2G_oVm-VEhR6pXXV92VpLD3DZaoNk89x9DIRuXCFyZlBEMyWRBTMn8HPZr5Gf1PddDqKY7jNjiVUD57Cj2WBo4ck1flxYruw==
- 3) Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- 4) Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338-361.
- 5) Dick, A. S., & Basu, K. (1994). Customer loyalty: Toward an integrated conceptual framework. *Journal of the Academy of Marketing Science*, 22(2), 99-113.
- 6) Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63, 33-34. <https://doi.org/10.2307/1252099>

- 7) Avramidou, N. D., & Theodorakis, I. (2014). Development of newcomer and experienced customers' loyalty in sports and fitness centers. *Sport Management Review*, 17, 419-431. <https://doi.org/10.1016/j.smr.2014.02.001>
- 8) García-Pascual, F., Parra-Camacho, D., & Aguado-Berenguer, S. (2023). Effect of service experience, engagement and satisfaction on the future intentions of customers of a sport services. *Heliyon*, 9(7), e17850. <https://doi.org/10.1016/j.heliyon.2023.e17850>
- 9) Alexandris, K., Theodorakis, N., Kaplanidou, K., & Papadimitriou, D. (2017). Event quality and loyalty of runners with different levels of running involvement: The case of the international marathon "Alexander the Great". *International Journal of Event and Festival Management*, 8(3), 292-307. <https://doi.org/10.1108/IJEFM-08-2016-0057>
- 10) Avourdiadou, S., & Theodorakis, N. D. (2014). Loyalty of novice and experienced customers in fitness and wellness centers. *Sport Management Review*, 17, 419-431. <https://doi.org/10.1016/j.smr.2014.02.001>
- 11) Meyer, C., & Schwager, A. (2007). Understanding customer experience. *Harvard Business Review*, 85(2), 116-126.
- 12) Chai, W. Q. (2023). The impact analysis of service quality in sports venues on customer satisfaction and loyalty. *Journal of Changchun Normal University*, (06), 194-196.
- 13) Yu, H. S., Zhang, J. J., Kim, D. H., Chen, K. K., Henderson, C., Min, S. D., & Huang, H. (2014). Service Quality, Perceived Value, Customer Satisfaction, and Behavioral Intention among Fitness Center Members Aged 60 Years and Over. *Social Behavior and Personality: An International Journal*, 42(5), 757-767. <https://doi.org/10.2224/sbp.2014.42.5.757>
- 14) Kelley, S. W., & Turley, L. W. (2001). Consumer perceptions of service quality attributes at sporting events. *Journal of Business Research*, 54(2), 161-166. [https://doi.org/10.1016/S0148-2963\(99\)00084-3](https://doi.org/10.1016/S0148-2963(99)00084-3)
- 15) Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338-361. <https://api.semanticscholar.org/CorpusID:140102436>
- 16) Li, H., Chen, G., & Qiao, J. (2019). Empirical study on the loyalty of participants in large-scale sports events: A case study of the Nanjing Marathon [Master's thesis, Nanjing University of Finance and Economics]. <https://d.wanfangdata.com.cn/thesis/D01892524>
- 17) Zhang, B. (2017). A study on the loyalty of live audiences at martial arts events: A case study of the "Sword Fight" event [Master's thesis, Guangxi Normal University]. <https://d.wanfangdata.com.cn/thesis/D01507780>
- 18) 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.
- 19) Cronin, J. J., Brady, M. K., & Hult, T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76, 193-218. [https://doi.org/10.1016/S0022-4359\(00\)00028-2](https://doi.org/10.1016/S0022-4359(00)00028-2)
- 20) Li, X., & Petrick, J. F. (2010). Toward a comprehensive model of loyalty formation: The roles of quality and value. *Leisure Sciences*, 32, 201-221. <https://doi.org/10.1080/01490401003709123>
- 21) Howat, G., & Assaker, G. (2013). Hierarchical effects of perceived quality on perceived value, satisfaction, and loyalty: Empirical results from Australian public outdoor aquatic centers. *Sport Management Review*, 16, 268-284. <https://doi.org/10.1016/j.smr.2012.10.001>