

# Toward a better understanding of core and peripheral market demand for women's sporting events: An importance-performance map analysis approach

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## Introduction

- Although the concept of market demand has been examined extensively in many contexts, most of that scholarly attention has been primarily allocated to men's spectator sports.
- Existing knowledge of women's spectator sports has revealed that findings derived from men's spectator sports cannot necessarily be generalized and applied to the women's game (Delia, 2020; Dwyer, Lupinek, & Achen, 2018).
- Many spectator sports are not designed to accommodate female consumers, with the promotion of most sporting events focusing solely on the needs and preferences of male consumers (Delia, Katz, & Armstrong, 2021; Sveinson & Hoeber, 2016).
- The Wuhan Open, a major women's professional tennis event, was used as an empirical setting for conducting this study—a setting notably absent in the hallmark sporting events and women's spectator sports literature.
- Our study had two objectives. First, we aimed to assess the effectiveness of core and peripheral market demand in predicting attendance intentions among the Wuhan Open spectators. Second, we sought to examine and compare the effects of the distinct market demand dimensions on attendance intentions based on spectators' gender (male vs. female).

## Methods

### Participants

To achieve our research objectives, a survey was distributed at the Wuhan Open, with the data collection occurring between September 21 to 29, 2019. With the permission of the organizing committee, the survey was administered by trained staff who randomly intercepted and interviewed spectators at different locations of the event venue. The dataset consisted of 418 usable responses (male = 249, female = 169). We compared our sample demographics with the latest annual report published by the organizing committee. T-test results revealed that no significant differences existed, providing support that our sample was representative of the actual Wuhan Open attendees.

### Measures

Core and peripheral market demand were measured by using a formative-formative hierarchical component model (HCM). Core market demand was formed by five first-order formative constructs: event activity, player quality, game schedule, game promotion, and economic consideration. Peripheral market demand was formed by two first-order formative constructs: peripheral services and venue characteristics (Byon et al., 2013). All items were measured by using a 5-point Likert scale.

### Data analysis

SmartPLS was selected as the primary tool for statistical analysis because our model included both formative and reflective constructs. Partial least squares structural equation modelling (PLS-SEM) was employed to examine the research model. In addition, importance-performance map analysis (IPMA) was conducted to offer more accurate marketing-related recommendations. According to Hair, Sarstedt, Ringle, and Gudergan (2017), IMPA combines the total effects of the PLS-SEM estimates (importance) with the average value scores (performance) of latent constructs (i.e., market demand factors) in the structural model to explain a specific endogenous variable (i.e., attendance intentions).

## Results

Structural model results.

Path	Complete sample			Males		Females			
	$\beta$	t-value	95% CI	$\beta$	95% CI	$\beta$	95% CI		
Core → Intentions	.45**	7.23	[.31; .55]	.40**	5.01	[.21; .53]	.56**	5.97	[.37; .73]
Peripheral → Intentions	.13*	2.01	[.0; .25]	.18**	2.25	[.03; .34]	.04 <sup>ns</sup>	.22	[-.18; .20]

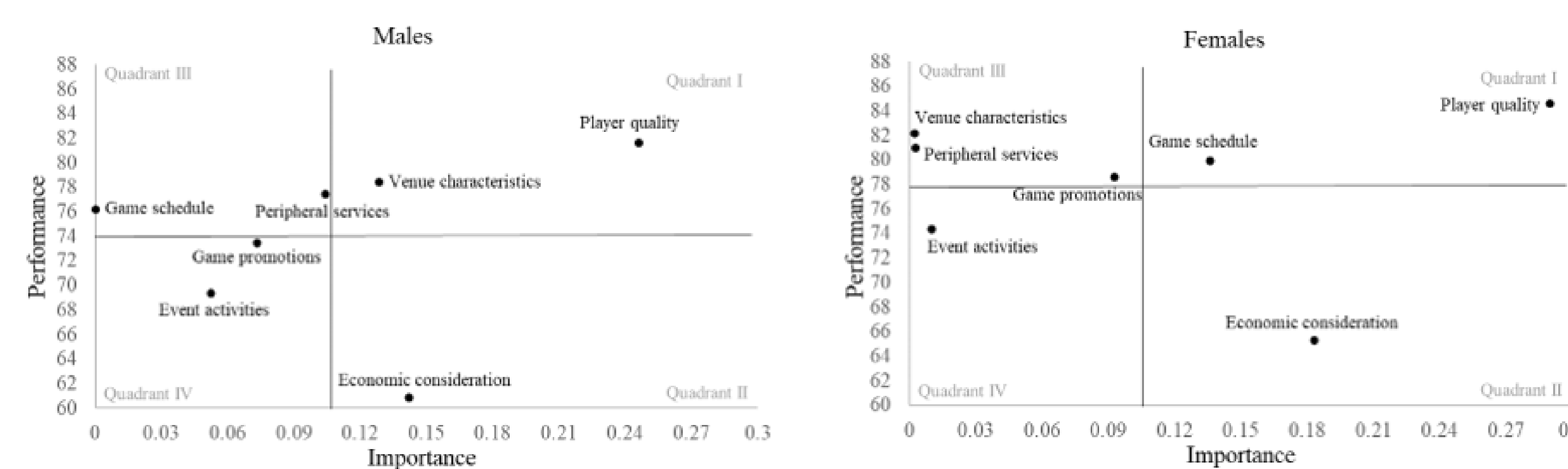
Note.  $\beta$  = Path coefficient; CI = Confidence interval; \*\* $p < .01$ ; \* $p < .05$ ; <sup>ns</sup> = Not significant; Core = Core market demand; Peripheral = Peripheral market demand; Intentions = Future attendance intentions.

## Results

The IPMA results.

Construct/indicator	Importance (males)	Importance (females)	Performance (males)	Performance (females)
Player quality	.27	.24	81.54	85.29
Event activities	.03	.05	68.71	73.84
Game schedule	.02	.17	76.29	79.86
Game promotions	.07	.08	73.20	77.96
Economic consideration	.14	.14	67.85	72.94
Peripheral services	.08	.01	74.10	78.74
Venue characteristics	.12	.01	78.32	82.13

The IPMA maps.



## Conclusions

- The IPMA results showed that player quality (i.e., on-field performance, presence of star players, player reputation), was most conducive to future attendance intentions, and its importance was consistent across male and female sports fans.
- Economic consideration was another key market demand component driving future attendance regardless of gender. This finding deviated from previous studies conducted in the context of men's spectator sports, where economic consideration was not significantly associated with behavioral outcomes (Byon et al., 2013).
- Game schedule was found to be an important market demand component that engendered attendance intentions among females, yet it was deemed not important at all among males.
- The IPMA results showed that venue characteristics and peripheral services were considered important peripheral market demand components among males to attend future events, but they were perceived of little to no importance among females. The indifference is likely due to the fact that many women's spectator sports including the Wuhan Open have been organized, operated, and marketed to target, by default, the male demographic (Fink, 2015). It is crucial to recognize few event campaigns, dedicated services, and venue experience are designed to accommodate female sports fans (Delia, 2020; Fink, 2015; Sveinson & Hoeber, 2016).

## References

- Byon, K. K., Zhang, J. J., & Baker, T. A. (2013). Impact of core and peripheral service quality on consumption behavior of professional team sport spectators as mediated by perceived value. *European Sport Management Quarterly*, 13(2), 232-263.
- Delia, E. B. (2020). The Psychological Meaning of Team Among Fans of Women's Sport. *Journal of Sport Management*, 1(aop), 1-12.
- Delia, E. B., Katz, M., & Armstrong, C. G. (2021). Understanding the Lack of Team Identification Research in Women's Sport. *Sport Marketing Quarterly*, 30(1), 58-68.
- Dwyer, B., Lupinek, J. M., & Achen, R. M. (2018). Challenge Accepted: Why women play fantasy football. *Journal of Sport Management*, 20(32), 1-13.
- Fink, J. S. (2015). Female athletes, women's sport, and the sport media commercial complex: Have we really "come a long way, baby"? *Sport Management Review*, 18(3), 331-342.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. Thousand Oaks: Sage.
- Qian, T. Y., Wang, J. J., & Zhang, J. J. (2020). Push and pull factors in esports live-streaming: A partial least square structural equation modeling (PLS-SEM) approach. *International Journal of Sport Communication*, 13(4), 621-642.
- Sveinson, K., & Hoeber, L. (2016). Female sport fans' experiences of marginalization and empowerment. *Journal of Sport Management*, 30(1), 8-21.