

Article

Sport Fans' Price Sensitivity Based on Loyalty Levels: A Case of Korean Professional Baseball League

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Abstract: For the sustainable development of the Korean Professional Baseball League (a.k.a., KBO League), it is critical to propose profitable and efficient pricing strategies for each team in the KBO League. Therefore, the purpose of this study was to understand KBO League fans' perceptions of price sensitivity. More specifically, this study explored how fans' perceptions of price sensitivity and latitude of price acceptance vary between different loyalty groups. A total of 213 valid responses were recruited from KBO League fans by using a convenience sampling approach. As a result, based on the levels of attitudinal loyalty and behavioral loyalty, fans were classified into four categories: loyal fans, latent fans, spurious fans, and indifferent fans. Moreover, loyal fans were found to be less sensitive to the ticket price increase of different levels (i.e., 10%, 20%, and 30%), followed by latent fans, spurious fans, and indifferent fans. Meanwhile, loyal fans have the highest level of the latitude of price acceptance, followed by latent fans, spurious fan, and indifferent fans. The findings of this study contribute to a better understanding of sport fans' responses to the change of ticket price and their perceptions of the accepted price range. Meanwhile, this study offers practical implications for marketers of KBO League teams to develop tailored pricing strategies for their fans by considering different loyalty levels.

Keywords: professional sport; sport fans; price sensitivity; price elasticity; latitude of price acceptance



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1. Introduction

The KBO League, governed by the Korean Baseball Organization (KBO), is the highest level of professional baseball league in South Korea. Established with six teams in 1982, KBO League has expanded to ten teams and has become the most popular professional sport in South Korea. Before the outbreak of the COVID-19 pandemic, the cumulative number of spectators had consistently surpassed 6 million from 2010 to 2019 [1]. However, it was observed that the average attendance had gradually declined since 2012, and it reached the lowest point (10,280) in 2019. In a similar vein, the seat occupancy rate in 2019 (54.8%) also reached the lowest level since 2010 (see Figure 1). Although the decrease to some extent may be attributed to external factors (e.g., more exposure to talented Korean star players in Major Baseball League (MLB) and internal factors (e.g., match-fixing and gambling), it has been argued that most teams in the KBO League have struggled to attract fans and maintain a sustainable fan base [2].

Driving fans to the stadium is considered the first step to the success of professional sport clubs as fan attendance contributes to a significant part of team revenue [3,4]. For example, ticket sales were estimated to account for about 30–40% of total MLB revenue from 2009 to 2017 [5]. Moreover, it should be noted that ticket sales play an even more significant role in the KBO League, averagely accounting for 50–60% of revenue in recent years [6]. It indicates the importance of ticket sales to the sustainable operation and development

of the KBO League [7]. Therefore, given the decreasing attendance and the critical role of ticket sales in the KBO team revenue, it is imperative for team marketers to come up with efficient marketing strategies to attract more fans to the stadium.

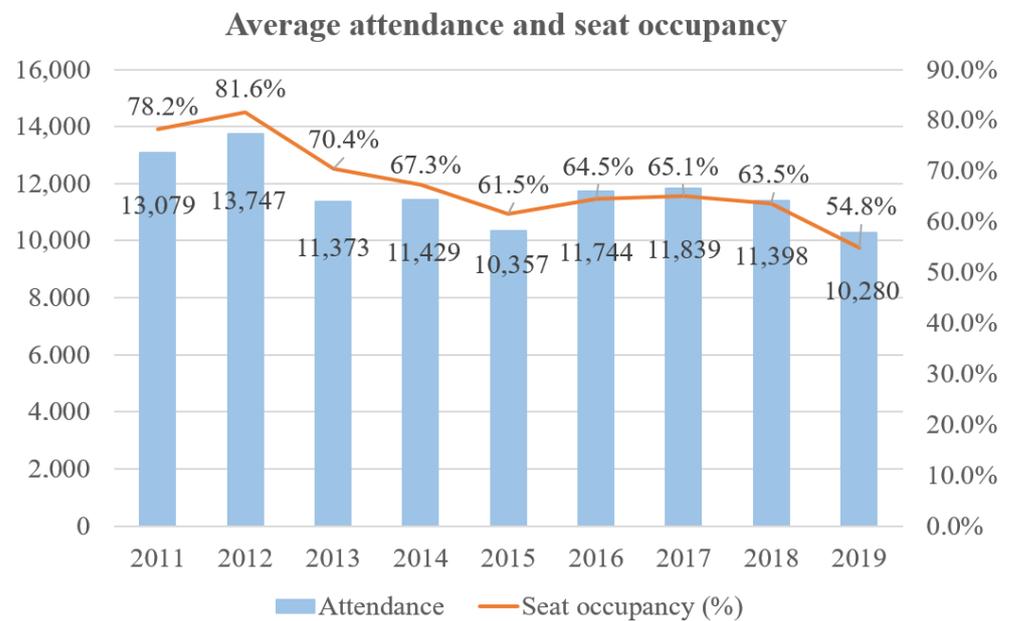


Figure 1. The average attendance and seat occupancy of KBO League (2011–2019) Source: Ministry of Culture Sports and Tourism [1].

It should be noted that the pricing strategy could be the most critical element of the marketing mix as it is the only element that directly determines revenue [8]. In professional sports, an efficient pricing strategy has proved to be a useful tool to maximize the team's revenue, and ticket-pricing studies are necessary for team marketers [9,10]. However, the pricing strategy in professional sports has been an under-researched topic until the early 2010s [3,11]. Since then, many scholars have attempted to find the most efficient pricing strategy to maximize teams' revenue from the financial perspective [12–16]. It should be noted that these studies proposed the most profitable pricing strategies from the Managerial perspective. However, there has been little research exploring sport fans' perceptions of the ticket price in the extant literature [17].

To better understand consumers' perceptions of price and plan a more efficient pricing strategy, marketing scholars often explore consumers' perception of price sensitivity to determine the price thresholds for products or services [18]. Price sensitivity has been known as a useful measure to understand consumers' reactions to prices and price changes [19]. Price sensitivity has been regarded as a critical variable as it affects consumers' product evaluations [20] and purchase decisions [21]. However, it is surprising that sport fans' price sensitivity to the ticket price of professional sport games has not been explored so far. Understanding sport fans' perceptions of price sensitivity toward the ticket price may be of great interest to team marketers and help them develop a more efficient and customized pricing strategy to attract more fans to the stadium.

Moreover, previous studies have empirically identified that consumers are often relatively insensitive to the price change within a specific range, which is defined as the latitude of price acceptance [22–24]. If the price falls within the latitude of price acceptance, consumers are less sensitive to the price increase or decrease [22,24]. Therefore, it would be of importance to find the highest point within the latitude of price acceptance in order to maximize the revenue from consumers' perspective. However, how sport fans perceive the accepted range of ticket price is still unknown in the extant literature. Therefore, it is critical to figure out the latitude of price acceptance in order to help sport marketers determine the fair price for sport fans.

Accordingly, the purpose of this study was to understand sport fans' perceptions of price sensitivity toward the ticket price of KBO League by measuring the price elasticity. Further, this study attempted to identify the latitude of accepted ticket prices for the KBO League games. In addition, it has been suggested that individual difference needs to be taken into consideration as individuals react differently to the price change [22]. As such, this study used the loyalty level as a tool to classify sport fans into different categories and explored how sport fans' perceptions of price sensitivity and latitude of price acceptance differ between different loyalty groups. This study can contribute to the sustainable development of KBO League by proposing the most effective and appropriate pricing strategy for both KBO fans and Managers.

2. Literature Review and Hypotheses

2.1. Price Sensitivity and Elasticity

Price sensitivity is defined as "the degree to which a customer's buying decisions are based on price-related aspects. A high level of price sensitivity manifests itself in regular comparisons of the price of a specific supplier firm with prices offered by other companies, and an immediate reduction of purchasing volume in case of a price increase" (Stock [25], p. 8). In general, price sensitivity is commonly measured by price elasticity, which is a quantitative way to assess how individuals respond to the quantity demanded of a product/service to its price change [26]. Individuals' perception of price elasticity can be determined by various factors, such as availability of alternatives, the share of consumer's income, consumer preference, and necessity [26–28]. Price elasticity primarily has two situations. First, price inelastic demand happens when the relative change in price leads to a smaller relative change in demand, and therefore the value of price elasticity will be below 1.0. Second, elastic price demand occurs when the relative change in price results in a bigger relative change in demand, and therefore the value of price elasticity will be greater than 1.0 [29]. The price elasticity of demand can be illustrated in the formula below.

$$\text{Price elasticity of demand} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

In addition, price elasticity of demand can be very useful in practice because it is a relative index of total sales (price*quantity) that changes as the price of a particular product fluctuates [26]. Therefore, it is possible to know the direction of the change in sales volume to predict the sales amount according to the change of the price. In some cases, it is very convenient to find the optimum price that maximizes the profit [26]. This approach has been applied to understand individuals' price sensitivity in different domains, such as retail market [22], telecommunications [30], healthcare [31], and energy [32,33]. Although consumers vary in their price sensitivity, their overall degree of reaction to the price change of a product/service can be represented by price elasticity [34]. It should be noted that consumers are sensitive to the price of both tangible and intangible products. For example, Casado and Ferrer [22] identified that consumers are sensitive to the price change among various retail products such as detergents, toilet paper, soft drinks, meats, liquid juices, and yogurts. Moreover, price elasticity was also observed in intangible service such as healthcare services [31].

However, it should be noted that sport fans' perception of price sensitivity has been rarely explored in the extant literature and how sport fans respond to the price change of sport games is still not clear [35,36]. To address the research gap, this study attempted to examine the sport fans' perception of price elasticity toward the ticket of KBO League games. More specifically, this study investigated how the change of ticket price influences sport fans' purchase intention across different loyalty levels.

2.2. Latitude of Price Acceptance

Latitude of price acceptance, based on the assimilation-contrast theory [37], refers to the accepted price range established around reference price [23,24]. According to

the assimilation-contrast theory, individuals judge a new stimulus based on the past experience in the category [37]. The reference price is established based on consumers' judgment on their previous experiences, comparison, and evaluation [23,38,39]. In other words, consumers formed thresholds for the accepted price range based on their perceived reference price [40]. Within the latitude of price acceptance, consumers show low or zero price sensitivity and think the price is fair and reasonable for the product or service [24]. That is, consumers are less or not sensitive when the price increases or decreases with the accepted range of price. The thresholds for the acceptable price range are established by consumers' reference price, which represents the fair price to purchase a product or service [23,41]. If the price falls above the upper threshold of the accepted price, consumers' price sensitivity can increase (amplification). On the other hand, if the price is lower than the lower point of the accepted price, consumers' price sensitivity will decrease (attenuation) [22,24]. Identifying the latitude of price acceptance can help marketers develop an "acceptable" pricing strategy from the perspective of consumers.

Previous studies found that consumers form the ranges of accepted price, based on their previous experience and knowledge, across different products, such as mobile phones [42] or smart clothing [43]. However, it should be noted that the accepted price range of professional sport games, which are a type of sport product [10], has not been explored in the extant literature. Given the uniqueness of sport service, sport fans' formation of price thresholds may not only be determined by the game itself but also fans' identification and loyalty toward the favorite team [44]. Therefore, to better understand the latitude of price acceptance for sport fans with different loyalty levels, this study attempted to determine the acceptable price range for sport fans with different loyal levels.

2.3. Sport Fan Loyalty

The concept of sport fan loyalty has generally been classified into two key dimensions in the extant literature on sport Management: Attitudinal loyalty and behavioral loyalty [45–48]. More specifically, attitudinal loyalty refers to sport fans' degree of affective commitment and inner relatedness to their teams [45,48]. The attitudinal dimension of loyalty focuses on the psychological state of mind sport fans have toward their teams [49], which is a useful tool to distinguish between spurious loyalty and true loyalty. On the other hand, behavioral loyalty was primarily defined by sport fans' patterns of consumption behaviors, such as repeat game attendance, (social) media consumption, repeat purchase of team-licensed products, and engagement in team activities [45,48,50–52].

Moreover, sport fans with different levels of attitudinal and behavioral loyalty may develop different perceptions towards their favorite teams [47,53]. According to the psychological continuum model proposed by Funk and James [47], sport fans' involvement progressively develops with corresponding behaviors toward their favorite teams [54]. In a similar vein, loyalty level plays an essential role in determining sport fans' price sensitivity and latitude of price acceptance [55]. In the field of sport, Ouyang, Hungenberg and Gray [36] found that more satisfied customers are less sensitive to price in the commercial martial arts centers. Although there has been little research conducted on exploring the role of sport fans' loyalty level in their perceptions of price sensitivity and the latitude of price acceptance, previous studies have identified that loyal fans are more likely to put extra effort into attending games to support their favorite teams [48,53,56], and therefore would be less sensitive to the ticket price change and have a higher level of the latitude of price acceptance. Therefore, the following hypotheses were established.

Hypothesis 1 (H1). *Sport fans with higher levels of attitudinal loyalty and behavioral loyalty would have lower levels of price sensitivity.*

Hypothesis 2 (H2). *Sport fans with higher levels of attitudinal loyalty and behavioral loyalty would have higher levels of the latitude of price acceptance.*

3. Methods

3.1. Participants

Participants of this study ($N = 213$) were recruited from university students who are KBO League fans. According to a report of Korea Professional Sports Association [57], most KBO League fans are in the 20s and university students. Meanwhile, they are the group that is more sensitive to price change [58]. Therefore, university students were deemed as the appropriate sample for this study. The details of the demographic background are shown in Table 1.

Table 1. Demographic characteristics of research participants ($N = 213$).

Categories	<i>n</i>	%	
Gender	Male	140	65.7
	Female	73	34.3
Frequency of attendance	Less than 1 time	69	32.4
	2–5 times	68	31.9
	6–9 times	42	19.7
	More than 10 times	34	16.0
Favorite team	Samsung Lions	24	11.3
	SK Wyverns	24	11.3
	Lotte Giants	20	9.4
	Doosan Bears	41	19.2
	KIA Tigers	33	15.5
	Kiwoom Heroes	9	4.2
	LG Twins	17	8.0
	Hanhwa Eagles	25	11.7
	NC Dinos	13	6.1
KT Wiz	7	3.3	
Period of support	Less than 1 years	45	21.1
	2–5 years	60	28.2
	6–9 years	53	24.9
	More than 10 years	55	25.8

3.2. Survey Instrument

The survey instrument was comprised of four sections. The first section includes demographic items, including gender, frequency of attendance, favorite team, and the period of support. The second section includes the scales adopted from Mahony, Madrigal and Howard [48] and Bauer, Stokburger-Sauer and Exler [45] in order to measure sport fans' attitudinal loyalty (7 items) and behavioral loyalty (5 items). Both scales of attitudinal loyalty ($\alpha = 0.957$) and behavioral loyalty ($\alpha = 0.955$) revealed adequate internal consistency reliability in this study. Third, the price elasticity was measured by the technique of Andreyeva, Long and Brownell [28] to assess sport fans' change of purchase intention to the price increase (i.e., 10%, 20%, and 30%). Finally, the three items for measuring the latitude of price acceptance were developed based on Lewis and Shoemaker [59] and Erdem, et al. [60]. In addition, the reference price was set at 10,000 Korean Won (approximately 9 USD) based on the average ticket price in the KBO league. The details of survey items were shown in Appendix A.

Moreover, as the items were originally written in English, the back-translation method [61] was used to develop the survey instrument of the Korean version and ensure its meaning

was consistent with original items. Further, a content analysis was conducted by three sport Management professors to ensure the clarity and relevance of the Korean items. After a few modifications, the survey instrument was finalized.

3.3. Data Collection

Data were collected from KBO League fans in South Korea using convenience sampling. In particular, two trained survey administrators participated in the procedure of data collection. After obtaining the consent of participants, survey administrators explained the purpose of this study and instructed them how to answer the questions. Participants who are not KBO fans were excluded from this study. As a result, a total of 230 questionnaires were collected. After removing incomplete responses, 213 valid responses were used for further analysis.

3.4. Data Analysis

Data analysis includes two phases. First, the means of attitudinal loyalty and behavioral loyalty were calculated to classify sport fans into four categories. Second, a series of ANOVA were performed to test the difference in price elasticity and latitude of price acceptance according to loyalty groups. Moreover, the post-hoc Tukey test was performed to compare the difference between loyalty groups. According to Cohen [62], 30 participants per group should lead to about statistical power of 80% for detecting medium to large effect sizes. Therefore, the sample size of this study ($n = 213$) was considered an appropriate sample size for ANOVA. Data were analyzed using the SPSS 23.0.

4. Results

4.1. Group Classification

Following the approach used by Baloglu [63] and Dick and Basu [64], sport fans were classified based on the levels of attitudinal loyalty and behavioral loyalty. More specifically, a 2×2 matrix was constructed with high and low levels based on the means of attitudinal loyalty and behavioral loyalty. As reported in Table 2, four groups of sport fans were classified. Group 1 is *loyal fans* with high attitudinal loyalty and high behavioral loyalty ($n = 72$, 33.8%). Group 2 is *latent fans* with high attitudinal loyalty and low behavioral loyalty ($n = 51$, 23.9%). Group 3 is *spurious fans* with low attitudinal loyalty and high behavioral loyalty ($n = 32$, 15.0%). Finally, group 4 is *indifferent fans* with low attitudinal loyalty and low behavioral loyalty ($n = 58$, 27.3%).

Table 2. Classification of sport fans based on attitudinal loyalty and behavioral loyalty.

	High Attitudinal Loyalty	Low Attitudinal Loyalty
High behavioral loyalty	Loyal fans ($n = 72$, 33.8%)	Spurious fans ($n = 32$, 15.0%)
Low behavioral loyalty	Latent fans ($n = 51$, 23.9%)	Indifferent fans ($n = 58$, 27.3%)

4.2. Price Elasticity Analysis

There are three levels of the ticket price increase: 10%, 20%, and 30%. Further, a series of ANOVA were employed to assess sport fans' decreased purchase intention and compare the difference between loyalty groups using the post-hoc Tukey test. As reported in Table 3, significant differences ($p < 0.001$) were found between loyalty groups in sport fans' responses to the price increase of three levels (i.e., 10%, 20%, and 30%). In particular, when ticket price increases by 10%, loyal fans revealed a lower level of decreased purchase intention (10.28%) than latent fans (36.08%), spurious fan (40.31%), and indifferent fans (50.60%). Moreover, when ticket price increases by 20%, it showed that loyal fans' decreased purchase intention (16.88%) was significantly lower than latent fans (40.59%); and spurious fans' decreased purchase intention (49.69%) was significantly lower than indifferent fans (62.12%). In a similar pattern, when price increases by 30%, loyal fans' decreased purchase intention (25.49%) was significantly lower than latent fans (45.39%); and spurious fans'

decreased purchase intention (62.01%) was significantly lower than indifferent fans (73.14). Therefore, Hypothesis 1 was supported.

Table 3. Sport fans' price elasticity based on loyalty groups (Reference price: 10,000 Korean Won).

Ticket Price Increase	Groups	Decreased Purchase Intention (Mean %)	S.D.	F	Post-Hoc Turkey Test
10%	Loyal fans	10.28%	23.46	14.685 ***	1 < 2, 3, 4
	Latent fans	36.08%	45.13		
	Spurious fans	40.31%	36.50		
	Indifferent fans	50.60%	39.45		
20%	Loyal fans	16.88%	21.87	20.268 ***	1 < 2, 3 < 4
	Latent fans	40.59%	41.83		
	Spurious fans	49.69%	33.36		
	Indifferent fans	62.12%	38.46		
30%	Loyal fans	25.49%	25.41	21.239 ***	1 < 2, 3 < 4
	Latent fans	45.39%	39.96		
	Spurious fans	62.01%	39.10		
	Indifferent fans	73.14%	39.35		

Note: *** $p < 0.001$.

4.3. Latitude of Price Acceptance Analysis

In this phase, sport fans' perceptions of fair price, minimum price, and maximum price for a ticket to attend a KBO League game were analyzed by a series of ANOVA, and the differences between groups were compared by using the post-hoc Tukey test. As reported in Table 4, the results showed significant differences between loyalty groups ($p < 0.001$). For the most appropriate price (i.e., fair price), loyal fans showed the highest level of 16,347.22 Korean Won, which was significantly higher than latent fans (13,812.52 Korean Won). Meanwhile, spurious fans' fair price (11,250.00 Korean Won) was significantly higher than indifferent fans (9431.03 Korean Won).

Table 4. Sport fans' latitude of price acceptance based on loyalty groups (Reference price: 10,000 Korean Won).

Price Level	Group	Ticket Price (Korean Won)	S.D.	F	Post-Hoc Turkey Test
Most appropriate ticket price	Loyal fans	16,347.22	6470.21	16.378 ***	1 > 2, 3 > 4
	Latent fans	13,812.52	7366.70		
	Spurious fans	11,250.00	4392.07		
	Indifferent fans	9431.03	3853.06		
Minimum price	Loyal fans	8861.11	3585.20	11.025 ***	1 > 2, 3, 4
	Latent fans	6647.59	2755.53		
	Spurious fans	6218.75	2561.93		
	Indifferent fans	5844.83	3543.23		
Maximum price	Loyal fans	37,541.67	29,240.11	8.716 ***	1 > 2, 3, 4
	Latent fans	30,509.80	23,073.25		
	Spurious fans	23,093.75	13,913.00		
	Indifferent fans	28,577.46	10,820.78		

Note: *** $p < 0.001$.

For the very low price (i.e., minimum price), the loyal fans revealed the highest level (8861.11 Korean Won), followed by latent fans (6647.59 Korean Won), spurious fans (6218.75 Korean Won), and indifferent fans (5844.83 Korean Won). The post-doc Turkey test showed that the loyal fans group is significantly higher than the other groups (i.e., latent fans, spurious fans, and indifferent fans). For the overly high price (i.e., maximum price), loyal fans showed the highest level of 37,541.67 Korean Won, which was significantly higher than latent fans (30,509.80 Korean Won). Meanwhile, spurious fans' fair price (23,093.75 Korean Won) was significantly higher than indifferent fans

(18,577.86 Korean Won). As such, Hypothesis 2 was supported. The summary results of ANOVA are reported in Table 4.

5. Discussion

In order to develop an efficient and profitable pricing strategy for the sustainable development of the KBO League, this study explored sport fans' perceptions of price sensitivity and accepted price range based on different loyalty levels. The findings showed that sport fans with higher levels of attitudinal loyalty and behavioral loyalty were less sensitive to the ticket price change of different levels (i.e., 10%, 20%, and 30%). Moreover, sport fans with higher degrees of attitudinal loyalty and behavioral loyalty have the highest fair price, maximum price, and minimum price for the KBO League game tickets. The findings provide several significant theoretical contributions to the extant literature and practical implications to marketers of professional sport leagues.

First, it was found that classification based on attitudinal loyalty and behavioral loyalty is a useful tool to understand sport fans. The 2×2 classification of attitudinal loyalty and behavioral loyalty provides a more comprehensive understanding of sport fans' outward behaviors and psychological attachments [49]. In particular, this study identified different categories of sport fans—loyal fans, latent fans, spurious fans, and indifferent fans. Although these segments may provide insightful implications for researchers and practitioners, it should be noted that they are rarely examined in the extant literature on sport Management. Based on the classification, this study further explored their different perceptions of price sensitivity and the latitude of price acceptance.

Second, this study identified significant differences in price sensitivity between different loyalty groups. Specifically, the loyal fans revealed a lower level of decreased purchase intention for the ticket price increase of different levels. The findings are consistent with previous studies in various contexts [22,30–32,65]. The findings can be explained by the assimilation-contrast theory, which argues that individuals' judgments and attitudes vary according to the comparison of their initial judgments [37]. Moreover, previous studies have identified that loyal fans are more likely to invest more to support their favorite teams [48,53]. Therefore, even the price increases by 30%, most loyal fans are still willing to purchase a ticket to attend KBO League games. Moreover, it should be noted that when price increases by 10%, except for loyal fans, no significant differences were found among the other three groups (latent fans, spurious fans, and indifferent fans), indicating that the similarly decreased levels of purchase intention when ticket price increases by 10%. However, when the ticket price increases up to 20% and 30%, indifferent fans revealed a significantly decreased level of purchase intention; most indifferent fans were not willing to pay 20% or 30% more to buy a ticket to watch KBO League games.

Third, loyal fans revealed the highest level of the most appropriate tick price (i.e., fair price), while indifferent fans showed the lowest level of a fair price. Previous studies have identified the importance of ticket price fairness for sport fans with different loyalty levels [16,66]. This study found that loyal fans showed a significantly higher level of minimum and maximum ticket prices, and the other three groups revealed similar levels of minimum and maximum ticket prices without significant differences. It indicates that loyal fans revealed a higher latitude of price acceptance, and the latent fans, spurious fans, and indifferent fans showed a similar level of accepted price ranges. These patterns may be explained by the psychological continuum model [47]. Due to the different levels of involvement, sport fans' reactions, perceptions, and behaviors may vary accordingly. Moreover, previous studies have attempted to identify the latitude of price acceptance in various products and services [22,23,67].

5.1. Theoretical Implications

This study is one of the first attempts to identify sport fans' price sensitivity and their latitude of ticket price acceptance. Previous studies have investigated consumers' price sensitivity in different contexts [22,30–33], and most studies explored consumers'

price sensitivity intangible services, such as healthcare, telecommunication, and energy supply [30–33]. It should be noted that professional sport games, which are a type of sport product [10], consist of various tangible (e.g., stadium or facilities) and intangible elements (e.g., game itself and services provided by personnel) [10,68]. Due to the mixture of tangible and intangible attributes of professional sport games, it is more challenging to evaluate sport fans' perceptions of the ticket price. Therefore, the findings of this study fill the gap in the extant knowledge of sport consumer behavior and contribute to a better understanding of sport fans' reactions to ticket price change and their perceptions of accepted ticket price range.

Moreover, this study identified the critical role of the loyalty level in determining sport fans' responses to the tick price change of professional sport games. Although Ouyang, Hungenberg and Gray [36] found the link of satisfaction and price sensitivity in the context of commercial martial art centers, how sport fans react to the tick price change of sport games is still unknown. Therefore, this study provides empirical evidence on the relationship between loyalty levels and price sensitivity.

5.2. Practical Implication

These findings may have significant contributions to marketers when adjusting the ticket price. It is critical to know who and how many indifferent fans are in the team's fan base as they are more sensitive to the price change. Therefore, team marketers need to pay more attention to indifferent fans and identify their needs. For example, teams can launch various activities or events on different social media platforms to attract indifferent fans. Doing so can motivate indifferent fans to be more engaged and involved in team activities, which further enhance their loyalty levels [54].

These findings offer insightful implications for practitioners of the KBO League. As shown in Table 4, the most appropriate ticket price for indifferent fans is 9431.03 Korean Won, which is slightly lower than the average ticket price of KBO League (i.e., 10,000 Korean Won). Moreover, the average ticket price of KBO League is within the latitude of price acceptance for all groups. It implies that the current price may be too low, and price adjustment is necessary in order to generate more revenue. The findings of this study may provide a reference for adjusting the tick price of KBO League in the future. In addition, the approach used in this study may help other sports leagues in different countries identify the reference point for adjusting their ticket price to maximize the revenue.

5.3. Limitation and Future Research

This study is not without limitations. First, this study only included university students. Although university students dominantly represent the KBO League fans, sport fans of other age groups (e.g., the 30 s, 40 s, and 50 s) need to be considered in future studies to gain a more comprehensive understanding of sport fans' price sensitivity to the ticket price. Moreover, this study was conducted on baseball fans. Although baseball is the most popular sport in South Korea, future studies may include other professional leagues in South Korea, such as volleyball, basketball, and soccer. Sport fans in different leagues may reveal different levels of price sensitivity and the accepted price range. Finally, this study classified sport fans based on attitudinal loyalty and behavioral loyalty. Future studies can apply other concepts to segment sport fans, such as sport fan engagement behavior [69], sport eFANGelism [70], or technology readiness [71] to develop a more sophisticated pricing strategy for different segments.

6. Conclusions

With the aim to better understand sport fans' price sensitivity, this study explores the sport fans' price sensitivity and the latitude of accepted ticket prices for the KBO League games based on their loyalty levels. KBO fans are recruited in this study to evaluate their price sensitivity and the latitude of accepted ticket prices for the KBO League games. The findings of this study first identify how the change of ticket price affects sport fans'

intentions to purchase tickets and their latitude of ticket price acceptance for KBO League games. In particular, it is found that more loyal fans are less sensitive to the ticket price change and are less likely to reduce their purchase intentions of tickets for KBO League games. Moreover, more loyal fans have a higher level of the accepted price range of KBO League game tickets. This study is one of the initial attempts to identify sport fans' price sensitivity in the extant literature on sport Management. The findings contribute to a better comprehension of sport fans' reactions to the ticket price of professional games and the formation of the accepted ticket price range based on different loyalty levels. In addition, this study provides a direction for the sustainable development of professional sport leagues to design and implement sport fan-oriented pricing strategies.

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Data Availability Statement: The data presented in this study are available on request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Survey Items

Attitudinal loyalty

1. I am a real fan of my favorite club.
2. I am very committed to my favorite club.
3. There is nothing that could change my commitment to my favorite club.
4. I will not change my affiliation from my favorite club to another club in the future just because it is not successful anymore.
5. I will not change my affiliation from my favorite club to another club just because my friends try to convince me to.
6. It is really important to me that my favorite club continues playing in the KBO League.
7. The long-term success of my favorite team is important to me.

Behavioral loyalty

1. I have often attended games of my favorite team live in the stadium.
2. I have watched games of my favorite team on different media platforms.
3. I have purchased a lot of club-related merchandise.
4. I often wore the colors and/or the logo of my favorite team.
5. I have often participated in discussions about my favorite team.

Latitude of price acceptance (Reference price: 10,000 Korean Won)

1. At what price do you think the ticket price for a KBO League game to be most appropriate?
2. At what price do you consider the ticket price for a KBO League game to be too cheap, so cheap that you would question the quality?
3. At what price do you consider the tick price for a KBO League game to be too expensive, so expensive that you would not consider buying it?

Price elasticity (Reference price: 10,000 Korean Won)

1. When the ticket price increases by 10%, your intention NOT to purchase will increase _____%.
2. When the ticket price increases by 20%, your intention NOT to purchase will increase _____%.
3. When the ticket price increases by 30%, your intention NOT to purchase will increase _____%.

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