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# Examining the Role of Price Fairness in Sport Consumer Ticket Purchase Decisions

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## Abstract

Ticket pricing in professional sports is transitioning from a cost-based to demand-based approach. It has been argued that consumer perceptions of fairness regarding demand-based ticket pricing could influence purchase decisions. Perceptions of unfair pricing practices can lead to dissatisfaction and negatively affect purchase behavior. However, familiarity with demand-based pricing strategies could mitigate perceptions that real-time price fluctuations are unfair to the consumer. Guided by transaction utility theory, the current study examined the relationship between various ticket offers, consumer perceptions of fairness, familiarity, and intentions to purchase professional sports tickets. The findings support previous theory suggesting perceptions of fairness and purchase intentions differ based on specific transaction conditions. Source of the ticket, reference price, and familiarity played a role in these perceptions. This study extends the body of knowledge in sport consumer behavior by highlighting the value of fairness perceptions, familiarity, reference price, source of the ticket, and the use of price as a marketing tool.

**Keywords:** ticket pricing, consumer behavior, fairness, reference price

## Introduction

Demand-based based ticket pricing has been widely adopted within the sport industry over the last decade (Drayer, Shapiro, & Lee, 2012; Rascher, McEvoy, Nagel, & Brown, 2007; Moe, Fader, & Kahn, 2012). Strategies such as variable ticket pricing (VTP) and dynamic ticket pricing (DTP) have been implemented worldwide by professional sport organizations in response to the significant growth of the secondary ticket market through online platforms such as StubHub and Viagogo (Drayer et al., 2012; Shapiro & Drayer, 2012). These demand-based pricing strategies have resulted in revenue increases of anywhere from 5–30% (Rishe, 2012).

From the consumers' perspective, the market for purchasing tickets to sporting events has become increasingly complex in recent years. Daily price fluctuations, a viable resale market, and organizational marketing strategies such as price discrimination complicate the consumer purchase process. In complex environments, consumers are more likely to use heuristics, or cognitive shortcuts, to make decisions (Kahneman, 2003). Individuals tend to respond to situations, scenarios, and transactions with a short-term focus violating many assumptions of standard economic theory, such as maximizing utility (Dowling & Chin-Fang, 2007).

An example of heuristics within the context of demand-based pricing is transaction utility theory. The theory of transaction utility is focused on consumer

satisfaction regarding the price paid for a product in comparison to an established reference or anchor price (Thaler, 1983, 1985). Deviations from this reference price can be perceived as unfair by consumers, which may limit purchase intentions and negatively impact firm revenues (Kahneman, Knetsch, & Thaler, 1986; Wirtz & Kimes, 2007; Xia, Monroe, & Cox, 2004).

The individual and interactive roles of reference price and fairness, and consumer familiarity with demand-based pricing in general, have not been examined within the sport ticket purchase process. Furthermore, the secondary ticket market offers an alternative option for consumers to purchase tickets. The legitimacy of online ticket resale provides a unique environment in which to examine the impact of fairness and familiarity on purchase intentions by offering another ticket source for consumers. Therefore, the purpose of this study was to examine relationships between fairness, familiarity, reference price, ticket source, and purchase intentions within the context of tickets to a professional sporting event. This study was distinct in that it used an experimental design to illuminate perceptions and behavioral intentions based on various ticket offers.

## Review of Literature

Behavioral economists have challenged standard economic theory, suggesting that individuals attempt to maximize utility in any transaction. This argument is based on human attitudes and emotions influencing the decision-making process (Dowling & Chin-Fang, 2007). Simon (1955, 1972, 1982) developed the concept of bounded rationality in an effort to explain these influences. Bounded rationality is a form of heuristics, which are decision-making strategies in which individuals “simplify the problem by eliminating many possible solutions” (Dowling & Chin-Fang, 2007, p. 40). Heuristics can also be developed based on emotions (Chaudhuri, 2009), and this is the basis of bounded rationality.

Bounded rationality focuses on the human decision-making processes being a function of intuition rather than reasoning (Kahneman, 2003). According to Simon (1982), it would be unrealistic to examine all possibilities to maximize utility, so individuals engage in “satisficing,” in which they settle for an acceptable outcome that may not be the optimal solution. The “satisficing alternative” (Simon, 1982, p. 295) applies when a consumer believes maximizing utility comes at a cost or burden, so they are willing to accept less. Offers and negotiations fall into this category as negotiating parties come to an impasse because they believe an offer is unfair (Chaudhuri, 2009). These fairness

perceptions can be the result of perceived value, which is the focus of transaction utility theory.

### *Transaction Utility Theory*

Transaction utility theory examines the perceived value of a deal, which is influenced by more than just the price of a good (Thaler, 1999). The perceived value of a good can be influenced by factors such as attitudes and perceptions of the seller, previous experiences, and location of the purchase. These and other factors create a reference price in the mind of the consumer that is used as a point of comparison to the price of the good (Thaler, 1983). Thaler (1985) provided an example of this phenomenon with an experiment using a beer purchase on the beach. Participants were given a scenario in which they must provide a friend the maximum amount of money they would be willing to pay for a beer. The friend would make the purchase if the price was at or below the participant’s maximum amount. Although the good was the same in this scenario, some participants were told the purchase would come from a luxury hotel and others were told the purchase would come from a grocery store. Participants given the luxury hotel scenario were willing to pay twice as much as the grocery store participants even though the consumption experience was exactly the same.

Transaction utility is focused on an individual’s assessment of whether a certain price represents a good value (Xia & Monroe, 2010). A price below an established point of reference produces a positive transaction value, whereas a price above a reference point produces a negative transaction value. A positive transaction value is more likely to lead to an actual purchase, whereas a negative transaction value is much less likely to lead to a purchase and may also lead to negative attitudes towards the seller triggered by a perceived lack of fairness. Indeed, the concept of fairness is a significant factor in consumer evaluations (Xia & Monroe, 2008).

In terms of sporting event tickets, fairness perceptions may be influenced by factors such as the source of the ticket (i.e., sport organizations’ “primary market” or ticket resale “secondary market”) or comparisons to a reference price (i.e., previous purchase, face value). Additionally, familiarity with ticket pricing strategy could play a role in fairness perceptions. The following sections review literature on fairness, familiarity, and purchase intentions.

### *Fairness*

According to Kahneman et al. (1986), perceptions of fairness influence actions; therefore, profit-maximizing firms will consider these perceptions in business deci-

sions such as pricing. Maxwell (2002) broadly defined fairness as a measure of the acceptability of a price but further specified that individuals assess fairness based on both self-interest (i.e., I am getting the cheapest price) and social consciousness (i.e., organizations are following acceptable standards when pricing). These social norms related to fair play have a significant impact on economic transactions and are the focus of this investigation.

A consumer's internal reference price is a set standard based on previous purchases and external stimuli (Thaler, 1985). In essence, reference price can be perceived as the price that consumers believe is fair. When the price of a product deviates significantly from the reference price, it can be perceived as unfair by the consumer (Kahneman, et al., 1986; Maxwell, 2002). Perceptions of fairness can also be highly sensitive in nature. Kahneman et al. (1986) provided evidence that organizations take consumer perceptions of fairness into consideration when pricing products and services. Furthermore, consumers generally believe prices are higher than fair value, and are sensitive to past prices and competitor prices (Bolton, Warlop, & Alba, 2003).

Additionally, the impetus for price changes may impact perceptions of fairness. For example, cost-justified shifts in pricing maybe perceived as fairer than a price change driven by shifts in demand. However, in other cases, even cost-justified price changes might be deemed as unfair if competitor prices do not change (Vaidyanathan & Aggarwal, 2003). Bolton and Alba (2006) found that consumers consider price increases based on direct cost increases (i.e., labor cost, material costs) fairer than indirect cost increases (i.e., overhead costs). Regardless of the specific context, Maxwell (2002) concluded that, "Providing information on how the price was set does affect how price is perceived" (p. 208).

Within the context of sport, Kimes and Wirtz (2003b) examined fairness perceptions of golf (green and cart fees). Demand-based pricing was perceived as fair in certain cases based on how price adjustments were presented. Prices shifts based on time of day or discount offers were perceived as fair, where price shifts based on time of booking were perceived as unfair. Additionally, price changes in the form of discounts were perceived as fairer than price changes in the form of surcharges. In terms of sporting events, tickets are often strategically underpriced in an effort to promote higher attendance, increase profits through ancillary revenues, and maintain a level of satisfaction among fans (Courty, 2003; Krautmann & Berri, 2007). However, perceptions of fairness as it relates to spectator sport ticket prices have not been empirically examined.

Two variables related to fairness perceptions of price are highlighted in the current study: reference price

and source of the ticket. Reference price and its impact on perceived value, fairness, and purchase intention has been previously examined (Bearden, Kaicker, Borrero, & Urbany, 1992; Kahneman et al., 1986; Thaler, 1985; Winer, 1988). According to Maxwell (2002) consumers are self-serving, and therefore, actual prices higher than the reference price are perceived as unfair, but prices below the reference price are not (see Biswas, Wilson & Lacata, 1993 for an overview of early reference price literature).

Within the context of spectator sport, Drayer and Shapiro (2011) suggested the face value on a ticket represents a reference price, which influences perceived value. However, the role of traditional face value changes when teams implement DTP (Shapiro & Drayer, 2012). Consumers will still be exposed to a face value, which may act as a reference price. Yet, for some consumers this may be the only exposure to the ticket price, where others might evaluate price changes from the initial exposure over time. In the secondary ticket market, prices exist above and below the face value. Some consumers are aware of the face value of a secondary market price (which can be used as a reference price), where others are never exposed to the face value.

Based on previous examinations of reference price and fairness, and the distinct nature of face value in a demand-based ticket pricing environment, it is posited that a ticket price offer absent previous price information (face value or initial DTP price) will be perceived as fairer than an offer price that includes a lower previous price as a point of reference.

H1: Consumers who are not provided a previous price will perceive a ticket price offer to be fairer than those who are provided a lower previous price as a point of reference.

Additionally, previous research has emphasized the relationship between source and fairness. In their model, Xia et al. (2004) suggested perceived price fairness is affected not only by the details of the current transaction but also by the nature of the relationship between buyer and seller. These judgments are often based on previous experiences with similar transactions.

Another example of how researchers have considered the role of source in perceptions of fairness came from Campbell (2007), who examined differences between consumers' attitudinal responses when presented with human versus non-human sources of information. The author suggested consumers infer both affect and motive in human sellers that is otherwise absent when the information is presented by a non-human source (i.e., displayed on a price tag). Consumers respond differently to these distinct sources of information when their transaction values are positive or negative.

The role of consumer fairness perceptions within the context of sport may be magnified due to the ability to buy tickets in the primary and secondary market. Although these two markets sell essentially the same product, perceptions of primary and secondary markets are quite disparate. Specifically, the secondary market has, for many years, battled negative associations with price gouging, theft, and fraud (Drayer & Martin, 2010). Therefore, ticket source may play a role in perceptions of fairness. Specifically, we hypothesize primary market ticket prices will be perceived by the consumer as fairer than secondary market prices.

H2: Consumers with a primary market ticket price offer will perceive the offer as fairer than those with a secondary market ticket price offer.

### *Fairness and Familiarity*

The price of a product is often the catalyst for triggering responses related to fairness. However, the context of each transaction is equally important in determining the perceptions of fairness. Previous experience with the seller, knowledge of the price-setting strategy, and the seller's reputation are all examples of factors beyond the price itself that may influence perceptions of fairness (Kahneman et al., 1986; Xia et al., 2004; Maxwell, 2005). Drayer et al. (2012) suggested consumers expect sellers to play by a set of rules and if any of those rules are violated, the transaction is likely to be perceived as unfair. This, in turn, reduces the incentive organizations have to implement radically different marketing and pricing strategies from one year to the next. Further, within the context of sport marketing, Greenwell, Brownlee, Jordan, and Popp (2008) suggested the emotional nature of the highly attached sports fan along with the small number of competitive options may result in greater sensitivity to fairness issues. All of this research results in what Courty (2003) referred to as strategic underpricing in the primary market.

Despite a record of conservative pricing strategies in the sport industry, other industries have adopted more aggressive strategies. In the airline and hotel industries, where the terms *yield management* and *revenue management* are often used to refer to their demand-based pricing strategies, prices often fluctuate dramatically from day to day in what would typically result in negative perceptions of fairness. However, research in those industries has suggested these perceptions tend to decline over time (Wirtz & Kimes, 2007). Besides time itself, consumers' familiarity with a seller and their pricing strategies could mitigate perceptions of unfairness (Kimes, 1994). In other words, as consumers become more accustomed to playing by the new set of "rules" established by the sellers, they are less likely to

perceive a transaction as unfair. Wirtz and Kimes (2007) found that familiarity with fluctuating menu prices in restaurants moderated perceptions of fairness.

Transparency in transactions leads to higher levels of familiarity, which ultimately reduces perceptions of unfairness. Drayer et al. (2012) suggested this relationship might exist with DTP in sport, where familiarity with demand-based ticket pricing could moderate perceptions of price fairness. Based on previous examinations of consumer fairness perceptions and familiarity with pricing strategy in demand-based pricing environments, we propose the following hypothesis:

H3: Familiarity with demand-based pricing strategies will moderate the relationship between source, reference price, and fairness.

### *Fairness and Purchase Intentions*

Consumers' perceptions of fairness have been shown to have a substantial impact on both attitudes towards the seller and subsequent behaviors (Kahneman et al., 1986; Oh, 2000; Xia et al., 2004). Previous research suggested consumers' perceptions of fairness impacts firm profitability, and prices that are perceived as unfair can have a considerable effect on purchase decisions (Kahneman et al. 1986). These findings have been consistent in experimental research, where subjects participated in price negotiations (Guth, Schmittberger, & Schwarze, 1982; Ruffle, 1998), and in industries where prices fluctuate regularly such as hotels (Kimes & Wirtz, 2003a; Wirtz & Kimes, 2007).

Individuals may be willing to give up a certain payoff if they believe they have not been treated equitably. However, the context of the transaction plays a role in this process (Campbell, 1999; Fehr & Schmidt, 2004). As mentioned previously, perceptions of fairness could be affected by the source and reasons for the price change (Campbell, 1999; Sheng, Bao, & Pan, 2007) or the reference point in which consumers derive value for the product (Bolton et al, 2003; Kahneman et al., 1986). Ultimately, consumer behavior is a result of how an individual feels they are being treated. If an individual believes they are being treated fairly, they will reciprocate in a consistent manner (Rabin, 2004).

Sheng et al. (2007) examined the relationship between fairness and purchase intentions within the context of surcharges and bundled pricing. Fairness was found to play both a mediating and moderating role relative to purchase intentions. Fairness perceptions explained the relationship between partitioned and bundling price strategies and purchase intentions, and this relationship was stronger for partitioned pricing compared to bundling.

In terms of the current study, fairness perceptions were being evaluated based on different contexts (ref-

erence price and source of the ticket), with the goal of evaluating changes in fairness perceptions, and ultimately purchase intentions, under different circumstances. For example, fans who are provided an offer without a reference price in the form of a previous face value ticket price will perceive that offer to be fairer (H1) and therefore will be more likely to purchase the ticket compared to those who see a lower previous purchase price. Likewise, when consumers are provided an offer directly from the sport organization, they will perceive that offer to be fairer (H2) and therefore will be more likely to purchase the ticket compared to a similar secondary market offer. Thus, we hypothesize perceived fairness will moderate the relationship between source, reference price, and purchase intentions.

H4: Fairness perceptions will moderate the relationship between source, reference price, and purchase intentions.

In summary, price is only one factor within the purchase-making equation. Before making a purchase decision, sports fans weigh a number of competing variables or factors. And, understanding that most fans will use shortcuts (heuristics) to make the decision as opposed to weighing each piece of information, the current study sought to explore the impact of a few influential factors (i.e., familiarity, reference price, and ticket source) in predicting perceived fairness and purchase intentions among ticket purchasers.

## Method

In order to extend the knowledge of fairness and its influence on sport consumer attitudes and behaviors, the current study was an experiment designed to create scenarios in which consumers were offered tickets under various pricing conditions. Consumers face these realistic scenarios every day through the process of online shopping in the primary and secondary ticket markets. Pricing conditions can influence fairness perceptions and purchase decisions. Consumers also vary in their familiarity with the market and this knowledge may further affect consumers' attitudes and behaviors.

### Participants

Through a partnership with the *Philadelphia Inquirer*, the research team had access to a panel of 2,566 Philadelphia area sports fans. The sampling frame was made up of self-identified sports fans that were included in the newspaper's database, and agreed to participate in future research. As such, this panel is not necessarily representative of the general population of sports fans but rather reflects engaged sports fans in large metropolitan areas. The questions for this particular study were part of a larger survey examining a

variety of attitudes and perceptions of Philadelphia sports fans. Participants in the sampling frame were sent an email inviting them to participate in an online study examining fan perceptions of Philadelphia sports teams. A total of 589 participants returned surveys. However, after further examination of data specific to this study, 84 respondents were eliminated due to incomplete data, leaving a total of 505 usable surveys, yielding a response rate of 19.7%

### Research Setting and Procedures

Potential participants were sent an email with a link to the online survey hosted by Qualtrics. As an incentive, participants were told they would have an option to be entered into a raffle for one of five \$100 Amazon gift cards upon completion of the survey. Once a respondent agreed to participate they were provided a scenario in which they had an opportunity to purchase tickets to a Major League Baseball (MLB) game involving the Philadelphia Phillies (home team) against the Chicago Cubs (approximately two months prior to the game) in April 2013. Participants were provided information on the tickets including the section, row, seat number, a seating chart, and a view of the field from those specific seats (Appendix A). They were also provided a range of prices in which those seats had been sold (\$60–\$100) over the last several seasons. Participants were asked their level of interest in the game on a seven-point Likert-type scale (endpoints) and the maximum price (per ticket) they would be willing to pay for these tickets (WTP).

Respondents were randomly split into four groups based on a randomization feature provided by Qualtrics. This feature ensured each participant had a random and equal chance of being assigned into one of the four groups. In all categories, the participants were told this game had previously been sold out, but additional tickets became available. They were provided an offer (which will be referred to as Offer Price) to purchase these tickets at a price (per ticket) of 10% below their stated WTP. For example, if a participant stated their maximum WTP was \$100 for the ticket, they were offered the ticket at \$90. The information surrounding the offer was different for each group. Group 1 (primary with no previous price information,  $n = 125$ ) was told the Phillies had some extra tickets become available at the offer price. No other information was provided. Group 2 (primary with previous price provided,  $n = 128$ ) had a similar scenario to Group 1. However, the Group 2 participants were told that the Phillies use DTP and the original price of the ticket was 50% below their WTP, but due to high demand they are now available for purchase at the offer price.

Group 3 (secondary with no previous price information,  $n = 126$ ) was provided a scenario in which they decided to go to StubHub to find tickets for the sold out game and found tickets for these specific seats at the offer price. No other information was provided to this group. Finally, Group 4 (secondary with previous price provided,  $n = 126$ ) was given a similar scenario regarding purchasing tickets from StubHub as Group 3. They found a ticket on StubHub for the offer price; however, these participants were told the face value of the ticket was 50% below their stated WTP.

As mentioned previously, Maxwell (2002) stated that individuals assess fairness based on both self-interest and social norms. In this case, all respondents should consider their offer fair based on self-interest as their offer price is 10% below their stated WTP. However, the manner in which the offer is presented varies for each group, which may affect their perceptions of fairness based on social rules for how the price was set.

After each participant was split into a group and given an offer price with varying details, they were asked questions related to their likelihood to purchase the ticket at the offer price, their perceptions of fairness related to the offer price, and their familiarity with DTP and secondary market ticket transactions in general. Sample sizes were slightly unequal due to some respondents not completing the survey. All calculations were done instantaneously through Qualtrics.

### **Instrumentation**

The survey for the current study consisted of three sections with a total of 18 questions. The first section, in which participants were given information about the specific game and seat location, contained the two single items mentioned previously, game interest and maximum WTP. The second section of the survey contained 11 items. Likelihood to purchase the ticket after the offer price was provided was a single-item seven-point Likert-type scale measure (1 = Very Unlikely to 7 = Very Likely). Fairness was measured by a three-item adapted fairness scale (Kimes, 1994; Wirtz & Kimes, 2007). This was a seven-point semantic differential scale (Unfair-Fair, Unethical-Ethical, and Unacceptable-Acceptable). Familiarity was measured by a three-item adapted familiarity scale (Wirtz & Kimes, 2007). This was a seven-point semantic differential scale (Unfamiliar-Familiar, Uninformed-Informed, and Not Knowledgeable-Knowledgeable). Familiarity was measured for both DTP and the secondary ticket market. Both three-item scale scores were averaged to create one combined familiarity score. Finally, a single-item categorical measure was used to assess the number of tickets participants typically purchase in a given season. The final section of

the survey contained five demographic questions to profile the respondents.

### **Data Analysis**

Reliability was assessed for multi-item measures of familiarity and fairness prior to analyzing main effects. The Cronbach's alpha score for the three-item fairness scale was satisfactory at .93. Additionally, the six-item familiarity scale measuring familiarity with DTP and secondary market pricing was satisfactory ( $\alpha = .92$ ).

In order to test hypotheses, two variables were developed from the four offer groups: ticket source (primary or secondary market) and exposure to previous price information (reference price or no reference price). For hypotheses 1-3 a 2x2x2 factorial ANOVA model was developed to examine group differences in fairness perceptions. Three independent variables were included in this ANOVA model: ticket source, reference price information, and familiarity. A categorical familiarity variable was developed (High/Low Familiarity) and included in this model to test for potential moderation. For hypothesis 4 an additional 2x2x2 factorial ANOVA model was developed to examine group differences in purchase intentions. Three independent variables were included in this ANOVA model: ticket source, reference price information, and fairness. A categorical fairness variable was developed (High/Low Fairness) and included in this model to test for potential moderation. Assumptions for ANOVA were examined and there were no significant violations in the dataset.

### **Results**

Of the 505 participants, the average age was 36.1 ( $SD = 9.32$ ), somewhat lower than the average age for MLB fans (the majority of MLB fans are over age 55). The vast majority of respondents were male (84.2%) and Caucasian (94%), which was generally consistent with MLB fans. The majority of respondents had a family income level above \$100,000 (55.2%) and a bachelor's degree or higher (63.4%). Both of these demographic percentages were higher than MLB fans in general (Thompson, 2014).

Finally, 33.1% of respondents indicated they typically purchase tickets to three to five Phillies games per year, while 22.8% indicated purchasing tickets to 11 or more games per season. Approximately 21% of respondents indicated they typically purchase tickets to one to two games per year and another 21% indicated they typically purchase tickets to six to 10 games per year. Only 4.4% of respondents indicated that they have not previously purchased tickets to a game. The highest reported WTP for tickets in this study was \$200 and the lowest WTP was \$20.

**Table 1**  
Offer Group Fairness and Purchase Intention Means

Offer Groups Intention	Fairness		Purchase	
	Mean	SD	Mean	SD
Group 1 (Primary Market – No Reference Price)	5.43	.993	5.68	1.66
Group 2 (Primary Market – Reference Price Provided)	4.96	1.40	5.04	1.79
Group 3 (Secondary Market – No Reference Price)	5.28	1.15	5.52	1.59
Group 4 (Secondary Market – Reference Price Provided)	4.65	1.42	4.52	1.91

Note – Fairness and Purchase Intentions were measured on 7-point scales

**Table 2**  
Fairness 2x2x2 Factorial ANOVA Summary

Groups	df	MS	F	sig.	$\eta^2$
Source	1	6.36	4.11	.043	.008
Reference Price	1	5.44	26.03	<.001	.050
Familiarity	1	20.80	13.45	<.001	.026
Source *					
Reference Price	1	.560	.362	.548	.001
Source *					
Familiarity	1	.016	.010	.919	<.001
Reference Price *					
Familiarity	1	.152	.098	.754	<.001
Source *					
Reference Price*					
Familiarity	1	.161	.104	.747	<.001

A descriptive analysis of fairness and purchase intentions based on the four offer groups showed that Group 1, which was offered a ticket directly from the Phillies with no other information, had the highest perceptions of fairness overall and was most likely to purchase the ticket. Group 4, which was offered a ticket from StubHub, but was given information that the face value of the ticket was considerably lower than the offer price, had the lowest fairness perceptions, and was least likely to purchase the ticket (see Table 1).

**Hypothesis 1**

Hypothesis 1 stated consumers who are not provided a previous price would perceive a ticket price offer to be fairer than those who are provided a lower previous price as a point of reference. Table 2 provides a summary of the first ANOVA model assessing all group differences and interactions regarding fairness perceptions. The main effects for reference price were found to be significant  $F(1,505) = 26.03, p < .001, \eta^2 = .05$ . Participants with no previous price information associated with their offers perceived those offers as fairer than participants who saw the previous price was lower

than the offer they were provided (No reference price –  $M = 5.36, SD = 1.07$ , Reference price provided –  $M = 4.81, SD = 1.42$ ). Therefore, H1 was confirmed, providing evidence that even with comparable offers (10% below WTP) consumer perceived levels of fairness differ based on exposure to a reference price.

**Hypothesis 2**

Hypothesis 2 stated consumers with a primary market ticket price offer will perceive the offer as fairer than those with a secondary market ticket price offer. The main effects for source were also found to be significant  $F(1,505) = 4.11, p = .043, \eta^2 = .008$  (see Table 2). Participants with primary market offers perceived those offers as fairer than participants with secondary market offers (Primary –  $M = 5.20, SD = 1.24$ , Secondary –  $M = 4.97, SD = 1.33$ ). These results confirm H2, providing evidence that purchasing tickets from a sport organization directly is perceived as fairer than purchasing tickets on the resale market.

**Hypothesis 3**

**Table 3**  
Likelihood to Purchase Tickets 2x2x2 Factorial ANOVA Summary

Groups	<i>df</i>	<i>MS</i>	<i>F</i>	<i>sig.</i>	$\eta^2$
Source	1	2.62	1.03	.311	.002
Reference Price	1	.439	.173	.678	<.001
Fairness	1	151.81	59.65	<.001	.107
Source *					
Reference Price	1	30.29	11.90	.001	.023
Source *					
Fairness	1	7.79	3.06	.081	.006
Reference Price*					
Fairness	1	3.00	1.18	.278	.002
Source *					
Reference Price*					
Fairness	1	25.41	9.99	.002	.020

**Table 4**  
Likelihood to Purchase: Source\*Reference Price\*Fairness Interaction – Mean Group Differences

Group	Mean	SD
Reference Price and High Fairness		
Primary Market	5.34	1.57
Secondary Market	4.98	1.66
Reference Price and Low Fairness**		
Primary Market	3.52	2.09
Secondary Market	2.19	1.21
No Reference Price and High Fairness		
Primary Market	5.76	1.56
Secondary Market	5.60	1.56
No Reference Price and Low Fairness (Cell size too low N = 10)		
Primary Market	1	0
Secondary Market	4.25	1.49

Note – Likelihood to purchase was measured on a 7-point scale  
\*\* = Simple effects test significant at the .05 level

Hypothesis 3 stated familiarity would moderate the relationship between source, reference price, and fairness. The main effects for familiarity were found to be significant  $F(1,505) = 13.45, p < .001, \eta^2 = .026$ . Participants who were familiar with DTP and the secondary ticket market perceived their offers as fairer than participants with low familiarity (High familiarity –  $M = 5.25, SD = 1.33$ , Low familiarity –  $M = 4.86, SD = 1.20$ ). Even though familiarity was found to play a significant role in fairness perceptions, no significant interactions were found between source, reference price, and familiarity. Familiarity did not moderate the relationship between source and fairness or reference price and fairness. Therefore, H3 was not confirmed.

#### *Hypothesis 4*

Hypothesis 4 stated fairness perceptions would moderate the relationship between source, reference price, and purchase intentions. Table 3 provides a summary of the second ANOVA model assessing all group differences and interactions regarding likelihood to purchase. The main effects for source and reference price were not found to be significant. The only significant main effect was fairness  $F(1,505) = 59.65, p < .001, \eta^2 = .107$ . Participants with high levels of fairness perceptions were significantly more likely to purchase tickets compared to those with low fairness perceptions (High fairness –  $M = 5.44, SD = 1.61$ , Low fairness –  $M = 3.00, SD = 1.84$ ).

**Table 5**  
**Likelihood to Purchase: Source\*Reference Price Interaction – Mean Group Differences**

Group	Mean	SD
Reference Price		
Primary Market	5.34	1.57
Secondary Market	4.98	1.66
No Reference Price**		
Primary Market	5.04	1.79
Secondary Market	4.52	1.91

Note – Likelihood to purchase was measured on a 7-point scale  
 \*\* = Simple effects test significant at the .05 level

However, two interaction effects were found to be significant. The interaction between source, reference price, and fairness was significant  $F(1,505) = 9.99, p = .002, \eta^2 = .020$ . In order to identify which mean groups were significantly different from others based on purchase intentions, a test of simple effects was necessary (Meyers, Gamst, & Guarino, 2006). A test of simple effects focuses on the cell means separately for each level of a single independent variable. In this case participants were broken into six groups (High/Low Fairness, Reference Price/No Reference Price, Primary Market/Secondary Market). As Table 4 shows, for participants in the low fairness group that were exposed to a previous purchase price, purchase intentions differed based on source of the ticket  $t(40) = 2.53, p = .015$ . Participants in this group were significantly more likely to purchase if their offer came from the sport organization compared to the secondary market (Primary –  $M = 5.56, SD = 1.58$ , Secondary –  $M = 5.31, SD = 1.64$ ). No other simple effects group comparisons were found to be significant for these interactions. The individual interactions between source and fairness and reference price and fairness were not significant. Therefore, H4 was partially confirmed, as the interaction between all three independent variables was significant.

Additionally, the interaction between source and reference price was found to be significant  $F(1,505) = 11.90, p = .001, \eta^2 = .023$ . Simple effects testing showed that for groups that were exposed to a previous purchase price, purchase intentions significantly differed based on source of the ticket  $t(253) = 5.09, p = .025$ . As Table 5 shows, participants who were offered a ticket from the organization were more likely to purchase compared to those receiving an offer from the secondary market (Primary –  $M = 5.04, SD = 1.79$ , Secondary –  $M = 4.53, SD = 1.91$ ). No significant dif-

ferences in purchase intentions were found for the groups that were not exposed to a reference price.

## Discussion

The current findings showed that even though all participants were offered an identical ticket at the same relative price (10% below their stated WTP), fairness perceptions differed based on both the source of the ticket and the exposure to a reference price. Descriptive results showed that Group 1, which was offered a ticket directly from the Phillies with no other information, had the highest perceptions of fairness overall and was most likely to purchase the ticket. Group 4, which was offered a ticket from StubHub, but was given information that the face value of the ticket was considerably lower than the offer price, had the lowest fairness perceptions, and was least likely to purchase the ticket (see Table 1). In general, these findings are consistent with transaction utility theory and previous research on fairness perceptions and consumer behavior. As predicted, participants who were provided face value information as a reference price perceived their offer to be less fair and were less likely to purchase the ticket at the offer price. Additionally, fairness moderated the relationship between ticket source, reference price, and purchase intention. However, findings showed familiarity did not moderate the relationship between ticket source, reference price, and fairness. The following sections discuss the theoretical implications of our findings.

### Fairness Implications

While no interaction effects were found, the results suggest ticket source, reference price, and familiarity independently affected a consumer's perception of fairness.

In an era of rapidly evolving ticketing policies and more notably, a rapidly growing number of ticketing sources, the impact of these relationships is magnified.

First, ticket source was found to be statistically significant in determining fairness perceptions, as participants perceived the offer from the team to be fairer than the secondary ticket market offer. Professional teams have been around much longer than secondary ticket markets such as StubHub and Viagogo. In addition, the legitimacy of the resale market (due to scalping and illegal ticket brokers) is still a concern for the relatively new industry. Indeed, Drayer and Martin (2010) suggested secondary market firms are engaged in strategies aimed at increasing their perceived legitimacy. One such strategy is creating strategic partnerships with sports leagues and organizations. Examples of these partnerships include StubHub's deal with MLB and Viagogo's deals with several football clubs in the Barclay's Premier League and Bundesliga. While this has certainly helped legitimize some of the larger secondary market platforms, our findings support the notion that all else being equal, fans are still more comfortable purchasing from the team itself. Perhaps this opinion will change as the secondary market continues to evolve.

Familiarity also significantly influenced fairness perceptions. The more familiar a consumer is with the exchange process the more comfortable he/she is with the process and the provider, especially in an online environment (Gefen, 2000). In the current study, participants with high levels of familiarity perceived their offer as fairer than those with low familiarity. This finding is consistent with Wirtz and Kimes' (2007) investigation of familiarity and fairness within the hotel industry. However, there were no significant interactions effects, thus familiarity did not play a moderating role in this instance, which contradicts findings from Wirtz and Kimes.

This is an interesting finding within the context of sport, especially as the use of DTP by sport organizations and the proliferation of the secondary ticket market are relatively new phenomena. This is in contrast to revenue management strategies that have been in place in the hospitality and tourism industry for more than two decades. Perhaps the fact that demand-based pricing is relatively new in sport is limiting the importance of familiarity.

The influence of reference price on perceived fairness is a new finding as it relates to sport ticketing, and this relationship appears to parallel findings related to transaction utility theory. The offer groups that received information about a lower previous ticket price perceived the transaction as more unfair. Thaler (1985, 1999) noted that the reference price acts as a

specific point that consumers use to evaluate the merits of a transaction. The original price point seen by Groups 2 and 4 acted as a point of reference to assess whether or not the consumer was receiving a good deal, even though the boundaries of the deal were first established by the participants stating how much they would pay for the ticket. This finding is consistent with previous research regarding the relationship between transaction utility and fairness perceptions (Xia & Monroe, 2008, 2010). However, these results demonstrate transaction utility in a distinctive environment, where prices fluctuate daily in both primary and resale markets.

This finding also has implications for teams that have adopted DTP or even those that use any form of price discounting as consumers use reference prices to make determinations of the fairness of a transaction. Though they did not examine fairness specifically, Drayer and Shapiro (2011) uncovered several attitudinal and behavioral differences between those consumers who saw a face value printed on a ticket and those who did not. The current study extends our understanding of reference prices and their ability to manipulate consumer attitudes and behaviors.

#### *Purchase Intention Implications*

The findings related to H4 are consistent with heuristics and specifically transaction utility theory, suggesting attitudes based on reference price could limit or prevent consumers from maximizing utility (Dowling & Chin-Fang, 2007; Kahneman, 2003; Thaler, 1983, 1985). In this case, consumers with reference price information were significantly less likely to purchase a ticket, even though the price point was below their stated WTP. Sport consumers in this study were not maximizing utility based on their chosen WTP. In today's sport ticket market, considerable data and avenues for purchase are available, providing an opportunity for the sport consumer to make an optimal choice during the transaction. The current study provides evidence that, for the sport consumer, perceptions of unfair practices may inhibit utility maximization.

In general, our findings parallel the literature's impact of fairness (Kahneman et al., Rabin, 2004; Sheng et al., 2007; Wirtz & Kimes, 2007), and provide empirical evidence of the power of fairness perceptions in the sport consumer purchase process. Consumers felt an offer was unfair when provided information suggesting the seller (team or secondary marketplace) was profiting significantly from the transaction. These are important findings within the context of sport, due to the fact that sport ticket pricing has not been explored in this manner and sporting events are a distinct envi-

ronment due to the high levels of consumer attachment to the product (Trail, Anderson, & Fink, 2000).

Additionally, our findings suggest consumer fairness perceptions play a moderating role between price offers (under different conditions) and purchase intentions. For participants with high perceptions of fairness, source and reference price played a limited role in purchase decisions. However, for participants with low fairness perceptions these factors came into play. Specifically, participants with low fairness perceptions who saw a reference price were less likely to purchase a ticket in the secondary market compared to the primary market. Sheng et al. (2007) found a similar relationship existed when dealing with consumers with low levels of fairness perceptions. In their study consumers were less likely to accept surcharges when they were deemed unfair. Often times these attitudes are based on who is adding a surcharge and why. The same can be said in the current study as participants who deemed the offer as unfair were more sensitive to exposure to a reference price and the source of the offer.

Finally, our results suggest the source itself did not impact purchase intentions because primary and secondary market offers did not differ. As consumers become more knowledgeable and comfortable with purchasing tickets either from the team or on the secondary market, perhaps the negative perceptions of ticket resale might be reduced. However, these findings should be confirmed as the secondary market continues to grow and more teams implement real-time pricing strategies such as DTP.

#### *Limitations and Future Research Opportunities*

The current study provides a much-needed exploratory examination of consumer fairness perceptions within this new age of ticketing, with real-time pricing and a vibrant ticket resale market. As a result, the current results contribute to a growing line of sport consumer psychology research that aims to understand the micro impact of technologically driven pricing strategy within professional sport. That said, this study was not devoid of limitations.

First, this study represented a hypothetical transaction. There has been some criticism of the use of WTP when no transaction actually occurs. However, in one of the only studies utilizing a WTP question in the context of sport event tickets, Carmon and Ariely (2000) found that answering these questions in a real or hypothetical situation did not affect the participants' responses. Regardless, field experiments could be a valuable tool in understanding these phenomena in more detail.

Second, this study was delimited to one seat location in order to control for this variable and isolate fairness and familiarity effects. As an extension of our findings, seat location and other price determinants such as opponent, day and time of game, and stadium capacity should be explored. Additionally, time plays a considerable role in demand-based pricing decisions (Dwyer, Drayer, & Shapiro, 2013). Time was not evaluated in this particular case, but perhaps as a game draws near perceptions of fairness and ultimately purchase decisions may change. Also, this study focused on pricing that had increased due to high demand. As mentioned previously, demand fluctuations often present opportunities to purchase ticket prices below face value or initial price point. Certainly perceptions of fairness can play a role in low-demand environments. Future studies could extend this research by looking at a variety of events with various levels of demand.

Lastly, the sample of consumers was from one fan base in one sport, and as a result, was mostly homogeneous. Given the nature of the study, income level, in particular, could be an important factor in determining WTP or purchasing behavior. However, this sample reported an above average income level, and once again, was too homogenous to test for differences. Thus, there is an opportunity for future research to select a more heterogeneous group of sports fans and test demographic differences such as income. Taken together, these results should not be directly generalized to a population of all professional sports fans. Future research should extend this investigation beyond one city and one sport, as these results have implications for all forms and locations of spectator sport. Furthermore, sports fans of all types should be considered in addition to those who are highly engaged through newspaper consumption.

#### **Conclusion**

The purpose of this study was to examine relationships between fairness, familiarity, reference price, ticket source, and purchase intentions within the context of online ticket purchasing to a professional sporting event. An experimental design was used to create scenarios in which consumers were offered tickets under various pricing conditions. These realistic scenarios reflect the current online ticket-shopping environment in professional sport. Findings showed that pricing conditions can influence fairness perceptions and purchase decisions, which have significant implications for sport marketers.

Sport organizations have developed pricing strategies, including demand-based pricing and secondary market partnerships, as a response to the proliferation of the secondary market. However, the current results

suggest the importance of understanding the consumer's response to these shifts in pricing strategy. The source of the ticket, reference price, perceived fairness of an offer, and familiarity with demand-based pricing in an environment with resale options play a formidable role in the ticket purchase process. Sport organizations must be sensitive to the complex process involved in making a purchase decision. Price is certainly a consideration, but sports fans assess a number of competing factors in the decision-making process. The current study highlights ticket source, reference price, fairness, and familiarity, which all play a role in purchase behavior. These pricing factors and consumer attitudes are critical components of our understanding of sport consumer behavior, so sport marketers must emphasize consumer response to strategic ticketing initiatives. Ultimately, sport organizations should monitor consumer purchasing in the primary and secondary market to price tickets more efficiently and adjust to varying levels of demand.

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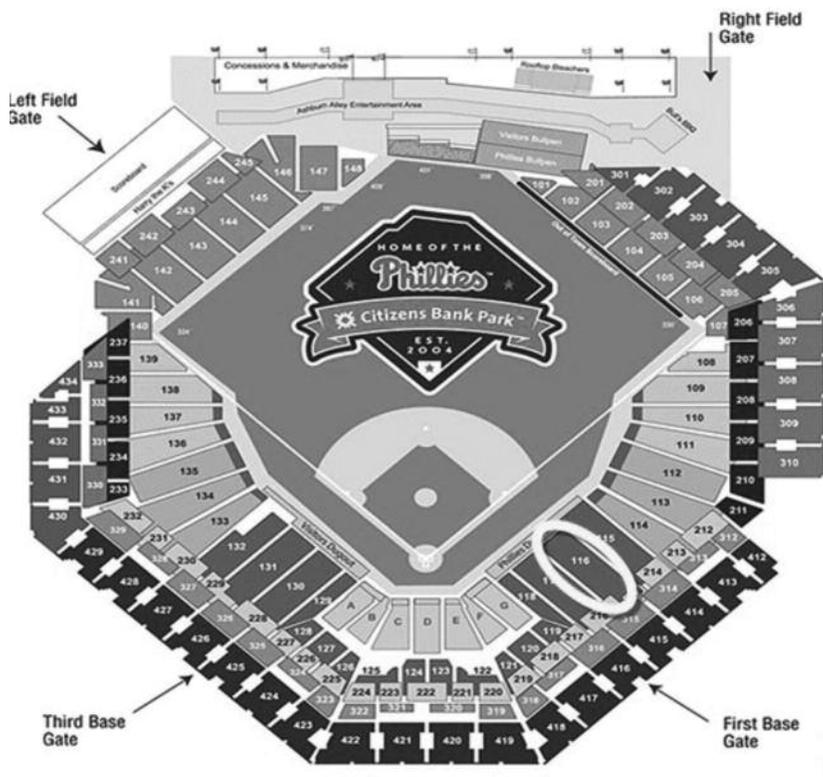
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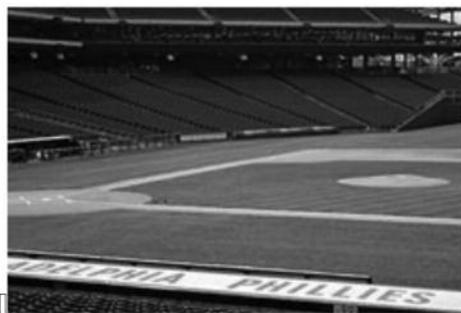
## Appendix A.

### Ticket Location Scenario

Consider the following scenario: you have an opportunity to purchase tickets to a Philadelphia Phillies game on Saturday night (7 pm), April 28 vs. the Chicago Cubs. The tickets are located in section 116 (infield, first base line; see diagram below) behind the Phillies dugout. Individual prices for these seats generally range from \$60 to \$100.



View from the seats



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## **Appendix B.**

### *Ticket Offers with Qualifiers*

#### **Primary Market with no Reference Price**

Suppose the Phillies vs. Cubs game previously mentioned is sold out; however, a few seats become available and you have the opportunity to purchase the exact ticket previously mentioned (section 116, behind the Phillies dugout) for (90% of the respondent's willingness to pay).

#### **Primary Market with Reference Price**

Suppose the Phillies vs. Cubs game previously mentioned is sold out; however, a few seats become available and you have the opportunity to purchase the exact ticket previously mentioned (section 116, behind the Phillies dugout). These tickets were dynamically priced by the Phillies (i.e., the ticket prices fluctuate daily based on demand). The ticket price originally started at (50% of the respondent's willingness to pay) but due to high demand the ticket is now priced at (90% of the respondent's willingness to pay).

#### **Secondary Market with no Reference Price**

Suppose the Phillies vs. Cubs game previously mentioned is sold out, so you decide to go onto StubHub two weeks before the game to purchase tickets. You find a ticket in the exact section described previously (section 116, behind the Phillies dugout) for (90% of the respondent's willingness to pay).

#### **Secondary Market with Reference Price**

Suppose the Phillies vs. Cubs game previously mentioned is sold out, so you decide to go onto StubHub two weeks before the game to purchase tickets. You find a ticket in the exact section described previously (section 116, behind the Phillies dugout) for (90% of the respondent's willingness to pay). The face value of this ticket is (50% of the respondent's willingness to pay).