

Investigating the role of the physical environment in hedonic service consumption: an exploratory study of sporting events[☆]

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Abstract

As we continue to enjoy economic growth and development in the latter part of the twentieth century, there is an abundance of disposable income for consumers to spend. Americans are spending more and more of these dollars in leisure activities. However, relatively little is known about which factors influence consumers' behavioral intentions (i.e., loyalty, word of mouth, willingness to pay a price premium) in this area. It appears that in this extremely attractive and growing services segment, academics, as well as practitioners, would benefit from investigating the relationships between the physical environment (i.e., servicescape) and several other key service constructs (i.e., positive effect, enduring involvement, service quality, waiting time, and value) on consumer behavioral intentions. With a better understanding of the servicescape's role in consumers' purchase decision processes, practitioners should be able to make adjustments in their marketing plans that should help to provide them with a sustainable advantage over their competition. This paper is intended to expand our understanding of how the servicescape influences behavioral intentions. A model is developed and tested on a sample of sporting event customers. The results support the model and lead to some interesting managerial implications. © 2002 Elsevier Science Inc. All rights reserved.

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1. Introduction

... One of the most significant features of the total product is the *place* where it is bought or consumed. In some cases, the place ... is more influential than the product itself in the purchase decision ... (Kotler, 1973, italics not added).

In the increasingly competitive hedonic services sector, managers are challenged to augment their core service with value-added benefits as a means of sustaining competitive advantage. In other words, because hedonic services are consumed primarily for the purpose of "affective gratification" (Kempf, 1999), the outcome of the service experience is evaluated not only in terms of utility, but also from an experiential perspective (Babin et al., 1994). As a result, "extras" such as surround sound cinema systems, gourmet

food at sporting events, and global navigation systems on golf carts have become commonplace. With these market changes, appreciable emphasis has also been given to managing the service firm's physical facility. Indeed, in an effort to increase revenue and compete against an expanding competitor base, the "servicescape" (Bitner, 1992) has become a focal point in the delivery of customer delight. This is especially true for nontraditional customers. For example, in order to accommodate a more entertainment-oriented market, sporting venues have revised their missions from providing a competitive team to embrace a more comprehensive entertainment objective. Evidence of this trend is apparent in the addition of game rooms, restaurants, bars, and even swimming pools to the sporting venue servicescape.

In addition to the interest that the added amenities have drawn, the facilities alone have attracted notable attention due to the venue's impact on the financial health and competitiveness of professional sports franchises (Robinson, 1997). For example, new baseball parks scheduled to open in eight cities over the next 4 years are projected to increase revenues by US\$25 million to US\$45 million per

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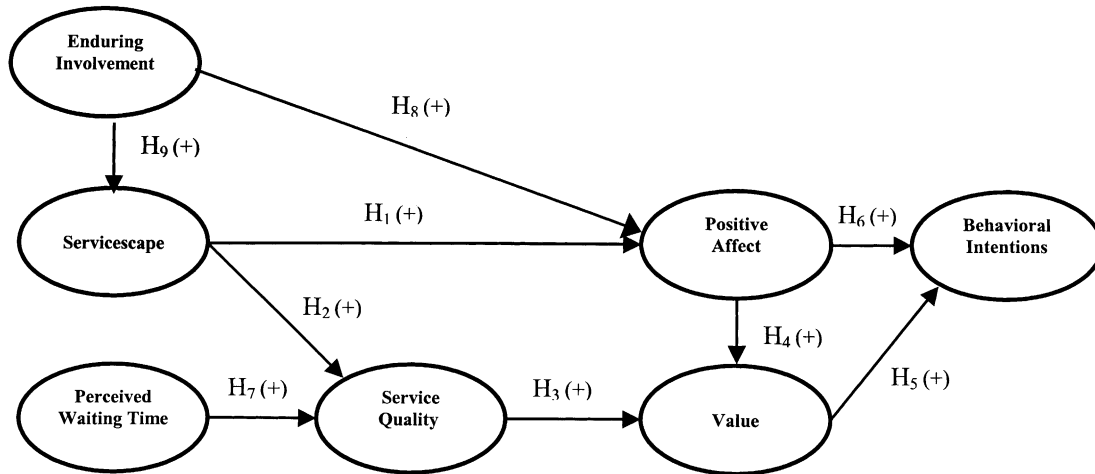


Fig. 1. The research model.

year (King, 2000). Even in those instances where new stadiums are not being built, many teams have upgraded their stadiums by adding new restaurants, club seats and concession areas, as well as branded party decks. For example, the Kansas City Royals recently built a 100-person party pavilion at a cost of US\$600,000. The pavilion sold out for all 81 home games within 6 weeks at ticket prices between US\$45 and US\$48 (Menninger, 2000).

Despite this facility-based trend, little empirical evidence is available that connects a venue's servicescape to such notable services constructs as enduring involvement, perceptions of value, service quality, waiting time, and behavioral intentions. What is known is that customers' service quality perceptions are influenced by their interaction with employees (i.e., functional quality), the perceived outcome of the service encounter (i.e., technical quality), and the service firm's physical environment (Gronroos, 1982; Lehtinen and Lehtinen, 1982; Rust and Oliver, 1994). Additionally, due to the extended duration with which sports fans interact with the physical environment and the notable role that the sporting venue plays in service delivery, the servicescape is believed to be the key factor in the development of repatronage intentions (Wakefield and Blodgett, 1994, 1999; Wakefield et al., 1996).

While it appears that the sports venue is a key variable in the development of customer service perceptions, it is not clear how this occurs. The literature suggests that the servicescape is mediated by cognitive and emotional responses (Bitner, 1992), and that it indirectly affects repurchase intentions, loyalty, facility image, and word of mouth (Baker et al., 1994; Wakefield and Blodgett, 1994; Wakefield et al., 1996). However, it is also possible that the link between the servicescape and these outcome variables is mediated by one or more intervening constructs. For instance, the physical environment may be considered a factor in the value integration process that results from the customers' assessment of what is received in the transaction vs. the sacrifices necessary for purchase (Zeithaml, 1988). We should also consider

whether other less prominent variables such as perceived waiting time (Taylor, 1994) and the level of enduring involvement (Bloch and Richins, 1983) have a significant effect on future purchase decisions and therefore call for greater managerial and scholarly attention.

It is clear that the physical environment is an important determinant of consumer perceptions and future behaviors. However, in order for service managers to benefit fully from this knowledge, it is critical that they understand more than the simple bivariate relationships between these variables. The purpose of this study is to expand our understanding of the servicescape to include a more holistic view of how the physical environment leads to consumer outcome behaviors by implementing an exploratory empirical investigation of several key hypotheses. In so doing, several issues are investigated, including how perceived service quality, positive effect, and service value interact in this setting and lead to future purchase behaviors. Moreover, the effects of waiting time and enduring involvement are considered due to their influence on sporting event customers, as well as their managerial relevance.

The research model that serves as the basis for this study is depicted in Fig. 1. Its purpose is to improve our knowledge of the process by which hedonic service customers, such as those who attend sporting events, form behavioral intentions. The model is intended as a broad view of this process. However, due to the complexity of these service encounters, no argument is offered that it reflects a truly comprehensive view. Support for the research hypotheses (which reflect the paths in the model) is derived primarily from the atmospherics literature, but several other research streams are also reviewed in the following section.

2. Conceptual background

To date, there has been a noticeable imbalance in the attention given to the study of the service environment,

especially when compared to the numerous efforts that investigate more interpersonal aspects of service encounters (Wakefield and Blodgett, 1999). An obvious reason for this phenomenon is the inseparability characteristic of service acts (Parasuraman et al., 1985). In many service industries, customers and service providers are inextricably linked due to the interpersonal nature of the encounter. For instance, for some consumers, the conversation that goes with getting a haircut is as important as the outcome itself. Under such conditions, the quality of the interaction will likely outweigh the importance of the environment. In other service industries, such as those where customers have either limited or no interaction with the physical facilities, the outcome of the encounter likely drives customer performance perceptions. Dry cleaning, photo developing, and fast food service establishments are common examples.

While services of a limited duration and those that are dominated by interaction represent only a subset of all service industries, they remain the focus of the vast majority of published services research. However, practitioners in other service contexts must actively manage the physical environment in order to excel. This perspective has been discussed at length in the retail literature (e.g., Baker et al., 1994; Babin and Darden 1996; Donovan and Rossiter 1982), but the role of the physical environment has been underappreciated in other research streams. For instance, researchers have only recently begun to study the effect of the servicescape in hedonic consumption. This is surprising given the extended duration of typical leisure services, as well as the prominence of the service setting in these encounters. In fact, these services have been referred to as atmospheric dominant due to the significance of the physical environment in the development of customer service perceptions (Turley and Fugate, 1992). What we do know from prior research is that the servicescape is mediated by cognitive (Bitner, 1992) and affective (Donovan and Rossiter, 1982; Mehrabian and Russell, 1974; Wakefield and Blodgett, 1999) responses. The objective here is to build on this knowledge base to consider these and other factors that may influence consumer behavioral intentions. In the next section, the research model is developed, beginning with a discussion of the determinants of the servicescape, and followed by its conceptual relationships with the other constructs depicted in Fig. 1. This leads to the nine hypotheses tested in the empirical study.

2.1. Hypothesis development

While the study of the physical environment in purchase decisions spans at least four literatures, the marketing literature is largely responsible for the conceptualization of the physical environment. It is defined as the “built” environment or the “servicescape” (Bitner, 1992) and represents where a product or service is purchased. As in the quality and satisfaction literatures, the study of the physical environment was originally investigated in relation

to its influence on the sale of physical goods. Kotler (1973) suggests that one of the most significant features of the total product is the place where it is bought or consumed. He also argues that store interiors and exteriors can be designed to create specific feelings in shoppers that can have an important signaling or reinforcing effect on a purchase.

In applying the study of the physical environment to service industries, Baker (1986) argues that service consumers are largely influenced by tangible cues (such as the physical environment) due to the lack of direct physical contact during a service encounter. She then develops a physical environment framework that classifies environmental variables into ambient, design, and social factors. However, perhaps the most widely cited study relative to the conceptualization of the physical environment is Bitner’s (1992) analysis of the effect of the physical surroundings on the behaviors of service employees and customers. In coining the servicescape term, Bitner (1992) develops a framework similar to Baker’s typology where the servicescape is considered to consist of ambient conditions, spatial layout and functionality, and signs, symbols, and artifacts.

In addition to the conceptual work advanced in marketing, other literatures are primarily responsible for establishing the conceptual relationships between the physical environment and various outcome measures (i.e., firm performance, buying intentions, consumer pleasure, and arousal). An example is Mehrabian and Russell’s (1974) study in the environmental psychology literature that linked the physical environment to service firm success. This link is supported based on the Stimulus–Organism–Response (S–O–R) paradigm, where physical or social stimuli directly affect the emotional state of a person, which in turn influences their behaviors. In a later study in the retailing literature, Donovan and Rossiter (1982) test Mehrabian and Russell’s (1974) model in retail settings. They provide empirical evidence that the pleasure, arousal, and dominance derived from the physical environment influence retail outcomes such as:

1. the enjoyment of shopping in the store, the time spent browsing the store’s environment;
2. the willingness to talk to employees, the tendency to spend more money than originally planned; and
3. the likelihood of returning to the store.

Similarly, Baker et al. (1992) found that the store environment plays a role in customers’ willingness to buy.

Several studies in the leisure services industry have further advanced this research agenda. Based on Bitner’s (1992) suggestion that the servicescape is mediated by cognitive and affective factors, Wakefield and Blodgett (1994) apply the servicescape to sporting venues and find that perceptions of stadium quality are directly and positively related to excitement and indirectly linked to repatronage intentions. In a separate empirical study, Wakefield et al. (1996) support a relationship between spectators’

perceptions of the stadium quality (i.e., “sportscape” quality) and pleasure. Turley and Fugate (1992) also view service quality and affective responses as outcomes of facility perceptions and further argue that this link is particularly strong for facility-driven services such as entertainment facilities. More recently, Wakefield and Blodgett (1999) report a positive link between the physical environment and affect.

Based on the review of the servicescape literature, it appears that the physical environment is evaluated on its ambiance and layout, as well as consumer perceptions resulting from physical cues (Baker, 1986; Bitner, 1992). Moreover, it is also apparent that the servicescape is mediated by both affective and cognitive (i.e., quality) factors. This leads to the first two research hypotheses.

Hypothesis 1: There is a direct and positive relationship between perceptions of the servicescape and positive effect.

Hypothesis 2: There is a direct and positive relationship between perceptions of the servicescape and perceived service quality.

Dating to Shostack’s (1977) call for research specific to service settings, it is apparent to managers and scholars alike that the point at which service is delivered marks the critical moment in determining service success or failure. This “moment of truth” (Bitner et al., 1994) is evaluated across multiple variables, which ultimately lead to the development of both short and long term purchase behavior. The notable attention given to the study of customer satisfaction/positive effect (e.g., Cadotte et al., 1987; Churchill and Surprenant, 1982; Fornell, 1992; Oliver, 1977, 1980, 1997; Oliver and Swan, 1989; Tse and Wilton, 1988; Westbrook, 1987), service value processes (e.g., Bolton and Drew, 1991; Ostrom and Iacobucci, 1995; Zeithaml, 1988), service quality perceptions (e.g., Boulding et al., 1993; Parasuraman et al., 1985, 1988; Rust and Oliver, 1994; Zeithaml et al., 1990, 1996), and the interrelationships that exist between them (e.g., Cronin and Taylor, 1992; Anderson et al., 1994; Taylor and Baker, 1994) is testament to the consequence of these intervening constructs.

Like other services, the provision of service quality, value, and positive effect is equally important for hedonic services. As a result, researchers in hedonic consumption have also considered these links. For instance, Wakefield and Barnes (1996) specify a positive relationship between perceptions of quality and value in a professional baseball setting. Justification for this path is based on the work of Zeithaml (1988) and others who suggest that quality represents one of the benefits derived from a service encounter. In keeping with the emerging atmospherics literature (e.g., Babin and Attaway 2000), positive effect is modeled to positively impact perceptions of value. This is based in part on research that has shown that “emotions associated with a specific atmosphere influence value

perceptions” (Babin and Attaway 2000, p. 92). In addition, as shown by Darden and Reynolds (1971), positive effect may motivate shopping activities. This leads to the next two research hypotheses.

Hypothesis 3: There is a direct and positive relationship between perceived service quality and service value.

Hypothesis 4: There is a direct and positive relationship between positive effect and value.

A continuation of the relationships between service value and affect leads directly to consumer behavioral intentions (see Fig. 1). These links are both well supported in the general marketing literature (e.g., Anderson and Sullivan, 1993; Bolton and Drew, 1991; Boulding et al., 1993; Cronin and Taylor, 1992; Fornell, 1992; Oliver, 1997; Ostrom and Iacobucci, 1995; Rust and Oliver, 1994; Voss et al., 1998) and in the hedonic services literature (e.g., Babin et al., 1994; Donovan and Rossiter, 1982; Foxall and Greenley, 1999; Turley and Fugate, 1992; Wakefield and Blodgett, 1994, 1999; Wakefield et al., 1996). These paths are also rational in that service customers with positive emotions resulting from their experience and those for whom the value integration process results in a positive outcome (i.e., they perceive to have received more than given), are intuitively more likely to engage in positive outcome behaviors.

The ultimate goal of any organization is to improve performance and firm profitability, and there are a number of perceptual measures that correlate highly with this success. Several that appear in the literature are customer loyalty, positive word of mouth (e.g., Zeithaml et al., 1996), price tolerance (Fornell et al., 1996), and repurchase intentions (e.g., Babakus and Boller, 1992; Boulding et al., 1993; Fornell et al., 1996). In the current study, measures that are similar in scope to those found in the literature are used to define behavioral intentions, and they are suggested to be preceded by customer value perceptions and positive effect. This leads to the next two research hypotheses.

Hypothesis 5: There is a direct and positive relationship between value and behavioral intentions.

Hypothesis 6: There is a direct and positive relationship between positive effect and behavioral intentions.

The extant research discussed above is unambiguous in establishing the importance of cultivating favorable cognitive and affective assessments. There is little controversy over whether these variables are important; the issue lies in the specification of the paths that govern their interrelationships. However, in addition to the constructs that have been discussed in the hedonic services literature, there are also others that have yet to be fully addressed. Managers of hedonic service venues are well aware that promoting customer enjoyment is a complex and volatile process. There are uncontrollable factors like the weather and a team’s performance that influence the customer experience,

as well as more controllable factors such as the amount of waiting time. The objective here is to focus on two variables that are key factors in the development of hedonic service perceptions, but have received only limited attention to date.

The first factor is waiting time. As anyone who has been subjected to lengthy lines at a sporting event can attest, a variable that is of particular importance to entertainment practitioners is perceived waiting time. Experience tells us that lengthy lines or extended delays can negate an otherwise enjoyable service encounter, regardless of perceptions of the service product, the interaction with employees, or the physical environment. Thus, practitioners who can successfully manage delays can manufacture more positive service perceptions than competitors that ignore this opportunity (Taylor and Claxton, 1994).

One of the earliest studies to suggest a relationship between waiting time and service evaluations is Parasuraman et al.'s (1985) gap study of perceived service quality. The authors' analysis indicates that customers identify punctuality as an important component of overall service evaluations. Katz et al. (1991) and Houston et al. (1998) empirically verify this relationship in their studies of the effect of waiting time on bank customers. Taylor and Claxton (1994) find similar results in the airline industry. Taylor's (1994) empirical results also support a significant relationship between delays and service perceptions. Based on the support garnered in the literature, as well as its practitioner relevance, perceived waiting time is included in the research model as an antecedent of perceived service quality (see Fig. 1). This leads to the next research hypothesis.

Hypothesis 7: There is a direct and positive relationship between perceptions of waiting time and perceived service quality.

A second factor that has received only cursory attention in hedonic consumption is enduring involvement. Enduring involvement describes the personal relevance of a product or service. It is more formally interpreted as the "strength of the preexisting relationship" between a consumer and a product or brand (Houston and Rothschild, 1978, p. 184). Moreover, enduring involvement is developed from past experience, is stored in long-term memory, and is triggered by the degree to which a purchase has personal meaning (Celsi and Olson, 1988; Petty and Cacioppo, 1981). Thus, the purchase decision of a product or service high in enduring involvement suggests that it is tied to consumer perceptions of self-image and personal values (Day, 1970; Richins and Bloch, 1986). Some support for the role of enduring involvement in hedonic activities exists, as it has been linked to such entertainment-oriented activities as horseback riding (Scammon, 1987), weightlifting (Lehmann, 1987), and listening to jazz music (Holbrook, 1987).

Managers of sporting events and the venues in which they take place are well aware that their core customer base

consists of those fans that are highly involved in the event. These loyal customers are often referred to as "super fans" or "fans for life" and customarily comprise the foundation of season ticket holders and fan clubs. Due to their importance to franchise performance, appreciable efforts are made to maintain feelings of enduring involvement in the franchise customer base. Evidence of this is apparent in the popularity of "retro" stadiums that are built in a classic style but are also equipped with modern amenities. The idea is to evoke feelings of pleasure and arousal that are stored in the long-term memories of highly involved fans, while also appealing to the novice fan that appreciates the modern comforts. For example, highly involved fans can use modern scoreboards that provide replays, game statistics, and player/team facts as part of their interaction with the physical environment. This should enhance the perception of the physical surroundings.

Despite the inherent significance of enduring involvement to servicescape perceptions and franchise performance, little research is available that examines this construct and its influence on hedonic service customer outcome behaviors. One exception is Wakefield and Blodgett's (1994) study that ties enduring involvement to the excitement of hedonic service consumers. It is suggested that the highly involved fan will be more excited about the servicescape due the positive emotions evoked during the encounter. In other words, enduring involvement is expected to enhance perceptions of the servicescape and increase favorable emotions. This leads to the final research hypotheses.

Hypothesis 8: There is a direct and positive relationship between enduring involvement and positive effect.

Hypothesis 9: There is a direct and positive relationship between enduring involvement and the servicescape.

3. Methodology

The overall objective of the data collection section was to measure the variables in the research model in order to determine their direct and indirect influence on consumer outcome behaviors. Data collection took place at a newly built baseball stadium. The measures used in the current study will be discussed followed by an analysis of the results.

3.1. Data collection method

Data were collected at a minor league baseball stadium in a medium-sized city in the Midwest United States. The stadium is located in a downtown area and, at the time of the data collection, was in its first year of operation. However, the team playing in this stadium has been in the city for a number of years and moved from an older, smaller facility that was located in the same area. All the data for this study

were collected at one game and an effort was made to approach all in attendance. This included distributing surveys to every tenth person entering each gate, as well as to those in line at concession stands and in the parking areas. The data collection method was similar to a mall-intercept method in that respondents were approached at a game by research assistants and asked to complete the survey. Respondents filled out the questionnaire on site and returned them when completed. The response rate was approximately 50%.

The research assistants were marketing students at a local university. Although each of the students had completed a marketing research course offered at the university, each student was required to go through a one hour training session prior to the data collection. During this session, interviewers were given detailed instructions that specified the sampling guidelines. The interviewers were informed that each respondent would be contacted to confirm their responses as a means to ensure the validity of the data. The data collection procedure resulted in 125 usable surveys being completed. Of the demographic data collected, there does not appear to be any notable differences between the sample and the broader population.

3.2. Measures

All constructs included in the model shown in Fig. 1 were measured using multiitem scales designed to tap all relevant domains of the construct (see Appendix A). While the scales used were based on prior work, all of the items were adapted so that the item content matched the industry. The servicescape scale consists of 28 items that are based on the conceptual work of Bitner (1992) and Baker (1986). Enduring involvement was measured with 4 items similar to those used by Wakefield and Blodgett (1994). The behavioral intentions measure consisted of 10 items, and was adapted from Zeithaml et al. (1996) study. The items assess multiple aspects of behavioral intentions, including repurchase intentions, positive word of mouth, loyalty, and willingness to pay a price premium. The remaining scales were also based on the literature and measured more traditional services constructs such as service quality (Babakus and Boller, 1992; Cronin and Taylor, 1992), positive effect

(Oliver, 1997), waiting time (Taylor, 1994), and service value (Sweeney et al., 1999; Cronin et al., 1997). Each of these scales consisted of five items.

All constructs were measured using seven-point response scales anchored by *strongly disagree* (1) and *strongly agree* (7). The validity of each scale was assessed by the following: (1) interitem correlations; (2) item–total correlations; and (3) exploratory factor analysis. With the exception of the behavioral intentions and servicescape scales, each measure exhibited significant and positive interitem correlations, high, positive item–total correlations, and a single factor extracted from the factor analysis that explained a high proportion of variance. The behavioral intentions scale initially resulted in a two-factor solution; however, the removal of two items provided a one-factor solution. The servicescape scale initially resulted in a six-factor solution. Items were sequentially deleted based on an analysis of loadings on the first-factor, as well as the size of cross-loadings in order to arrive at a one-factor solution. A total of 14 items were deleted. The resulting factor had an eigenvalue of 7.383 and explained 52.74% of the variance.

Discriminant validity between the constructs was assessed via LISREL 8.12 (Jöreskog and Sörbom, 1993). All items remaining from the validity analysis described above were used in a confirmatory factor analysis. The variances of each item were fixed to equal 1.0 and the covariances between each construct were sequentially fixed to equal 1.0. Comparing the baseline chi-square value (the value with the variances fixed to 1.0 and the covariances free) to the chi-square value when the covariance between a pair of constructs is fixed to 1.0 provides a test of discriminant validity. If the chi-square exceeds the baseline value by 3.84, there is evidence of discriminant validity. There were 21 pairwise comparisons made and the smallest chi-square difference was 106.4. Thus, it appears that there is strong evidence of discriminant validity between each of the constructs.

In addition to assessing the validity of each scale, reliability was assessed via Cronbach's alpha. Construct values were created by averaging the score on each scale item. Table 1 provides the mean, standard deviation, and Cronbach alpha for each scale, as well as the construct intercorrelations.

Table 1
Means, standard deviations, Cronbach's alpha, and correlation's of the constructs

Variable	Mean	Standard deviation	α	Servicescape	Waiting time	Service quality	Involvement	Positive effect	Value	Behavioral outcomes intentions
Servicescape	5.62	0.77	0.93	1.00						
Waiting time	5.38	1.01	0.90	0.59*	1.00					
Service quality	5.32	0.97	0.96	0.72	0.57	1.00				
Involvement	3.93	1.46	0.88	0.35	0.39	0.39	1.00			
Positive effect	5.63	1.04	0.94	0.65	0.63	0.60	0.51	1.00		
Value	5.16	1.14	0.91	0.70	0.66	0.64	0.44	0.80	1.00	
Behavioral intentions	4.86	1.06	0.91	0.39	0.63	0.58	0.68	0.80	0.78	1.00

* All correlations are significant at the $P < .0001$ level.

3.3. Analysis

The hypotheses, derived from the model shown in Fig. 1, can be represented by the following system of equations (Eqs. (1)–(5)):

$$\text{Servicescape} = \alpha + E_{11}\text{Enduring involvement} + H \quad (1)$$

$$\begin{aligned} \text{Service quality} = \alpha + E_{21}\text{Servicescape} \\ + E_{22}\text{Waiting time} + H \end{aligned} \quad (2)$$

$$\begin{aligned} \text{Positive effect} = \alpha + E_{31}\text{Enduring involvement} \\ + E_{32}\text{Servicescape} + H \end{aligned} \quad (3)$$

$$\begin{aligned} \text{Value} = \alpha + E_{41}\text{Service quality} + E_{42}\text{Positive effect} \\ + H \end{aligned} \quad (4)$$

$$\begin{aligned} \text{Behavioral intentions} = \alpha + E_{51}\text{Value} \\ + E_{52}\text{Positive effect} + H \end{aligned} \quad (5)$$

The system of equations was estimated using three-stage least-squares (3SLS) regression. This technique has been utilized previously in the marketing literature to estimate similar nonrecursive models (e.g., Anderson and Weitz, 1992; Siguaw et al., 1998). Ordinary least-squares regression (OLS) is not useful for estimating these equations since: (1) the OLS estimates may be inconsistent due to possible correlations between the regressors and the error terms; (2) the system is overidentified (i.e., there are more variables to be estimated than there are equations), which means that solving the equations may not result in a unique solution; and (3) unlike 3SLS, OLS does not allow the simultaneous estimation of the equations.

3.4. Results

The results of the tests of the hypotheses are presented in Table 2. The system of equations used to test the hypotheses has a system-weighted R^2 of .65.

3.4.1. Servicescape

Eq. (1) tests the relationship between enduring involvement and the servicescape. The relationship is positive and

significant ($E_{11} = 0.38$, $P < .001$) which provides support for Hypothesis 9.

3.4.2. Service quality

Eq. (2) tests the hypothesized effects of the servicescape and waiting time on service quality. As proposed in Hypothesis 2, servicescape has a significant influence on perceptions of service quality ($E_{21} = 0.61$, $P < .001$). Hypothesis 7 proposes a positive relationship between perceived waiting time and service quality. Our results provide support for this hypothesis ($E_{22} = 0.23$, $P < .002$).

3.4.3. Positive effect

Eq. (3) tests the antecedents of positive effect. As proposed in Hypotheses 1 and 8, enduring involvement ($E_{31} = 0.40$, $P < .001$) and the servicescape ($E_{32} = 0.51$, $P = .001$) have significant and positive relationships with positive effect.

3.4.4. Value

Both service quality (Hypothesis 3; $E_{41} = 0.29$, $P < .001$) and positive effect (Hypothesis 4; $E_{42} = 0.64$, $P < .001$) are significant predictors of the value construct.

3.4.5. Behavioral intentions

Value and positive effect are hypothesized to directly and positively influence behavioral intentions. Our results provide support for both of these paths ($E_{51} = 0.38$, $P < .001$; $E_{52} = 0.59$, $P < .001$).

4. Conclusions and discussion

This research examines a comprehensive model of how the servicescape may influence several key services marketing constructs. The results show that the servicescape does have a significant influence on consumer behavioral intentions; however, this impact is mediated by a number of other constructs. First, the servicescape has a positive and significant effect on positive effect, which is directly related to behavioral intentions. In addition, the servicescape positively influences perceptions of service quality, which in turn impacts value perceptions. Value perceptions act to influence positive

Table 2
Results of the hypotheses tests

Endogenous variable	Hypothesized influences	Hypothesis tested	Estimated coefficient (standardized)	P value
Servicescape	Enduring involvement	Hypothesis 9	$E_{11} = 0.38$.001
Service quality	Servicescape	Hypothesis 2	$E_{21} = 0.61$.001
	Waiting time	Hypothesis 7	$E_{22} = 0.23$.003
Positive effect	Enduring involvement	Hypothesis 8	$E_{31} = 0.40$.001
	Servicescape	Hypothesis 1	$E_{32} = 0.51$.001
Value	Service quality	Hypothesis 3	$E_{41} = 0.29$.001
	Positive effect	Hypothesis 4	$E_{42} = 0.64$.001
Behavioral intentions	Value	Hypothesis 5	$E_{51} = 0.38$.001
	Positive effect	Hypothesis 6	$E_{52} = 0.59$.001

effect and behavioral intentions. Thus, the relationship between servicescape and these marketing constructs appears to be somewhat complex.

Given that all the hypotheses are strongly supported, it would appear that the relationships between the servicescape, service quality, value, positive effect, waiting time, enduring involvement, and behavioral intentions depicted in Fig. 1 hold true for the minor league baseball environment. These findings shed light on a number of insights for both researchers and managers.

First, this research adds to a relatively new body of literature, which explores the role of the servicescape in hedonic service consumption. Although this has been studied extensively within the retailing area (e.g., Babin and Darden 1996), it is only recently that this has begun to be studied in the hedonic services area. Our findings support research reported by Wakefield et al. (1996) and Turly and Fugate (1992) regarding the role of the servicescape.

Moreover, our research extends existing research in two ways. First, it explores the influence of the servicescape on key services constructs (i.e., service quality, positive effect, value, waiting time, enduring involvement, and behavioral intentions) in a comprehensive model. Secondly, our research investigates the sporting environment in a more holistic fashion. In other words, the items used to conceptualize the physical environment may be more applicable to a broader range of service firms than the “sports arena only” items contained in the current literature. As marketers continue to move away from issues related to the conceptualization and measurement of service quality and/or positive effect to embrace more comprehensive models of the service experience, our research would seem to indicate the servicescape is an important construct to include in these models. This would appear to be especially true for more hedonic services such as sports.

Our research also provides evidence of the importance of involvement in the marketing of hedonic services. There are positive links between involvement and the servicescape, as well as between involvement and positive effect. This would seem to imply that the marketers of hedonic services should attempt to increase the involvement of customers with their service. For example, technology such as websites and e-mailed updates could be used to increase fan involvement with major league teams. However, in order to continue to increase attendance, marketers will have to improve efforts to market their services to those fans who are less knowledgeable about the sporting event itself, but who are attracted by peripheral aspects of the sports event such as the environment in which the event is held. The Master’s at historic Augusta National, center court at the All-England Club’s Wimbledon grand slam tournament, winner’s circle at Derby Downs during The Kentucky Derby, or Oriole Park at Camden Yards are just a few examples of venues with this type of appeal.

4.1. Implications for theory and research

From a research perspective, the model that we propose and test provides a more comprehensive assessment of how the servicescape influences key services marketing constructs than the literature advanced to date. It is also one of the first studies to explicitly incorporate involvement into a model of this type. It is possible that involvement could be a potentially important explanatory construct for hedonic services, especially with regard to the marketing of sports activities. In addition, involvement could act as a key segmentation variable since it may account for a great deal of the variance in what differentiates loyal fans from those less loyal. Accordingly, we suggest that involvement be included in future studies.

4.2. Implications for managerial practice

Although this study is exploratory in nature, it still provides some guidelines to managers in regard to managing their firm’s physical environment. It is critical that practitioners and academics realize that the marketing of hedonic services (more specifically sports activities) in the United States has become a large business. Each of the four major professional sports leagues (NBA, NFL, MLB, and NHL) have registered their highest attendance levels ever in the past few years, and NASCAR continues to be one of the fastest growing attendance sports in the country. In addition, the number of people attending college-sporting events continues to increase. On the surface, this would appear to bode well for sports marketers. However, at the same time, the cost of attending sports has increased dramatically. A recent survey conducted by Peter Harris Research Group and reported in *Sports Illustrated* indicated that total cost to attend sporting events was the number one reason given to be less likely to attend events. Accordingly, sports marketers must find ways to continue to enhance the experience fans have at sporting events in order to continue to experience the level of growth that has been documented over the past few years.

From a managerial perspective, the results highlight the importance of the servicescape as it relates to the quality of sports experience perceptions, positive effect, and the level of involvement with the sports experience. New innovations like ChoiceSeat that was introduced at Super Bowl XXXII and provides the fan with the ability to access real-time camera views from different angles as well as player and game statistics will have to continually be developed to provide a more attractive servicescape. These types of innovations not only will increase the perceived quality, satisfaction and involvement of the loyal fan, but should also help enhance the new fan’s experience, thus potentially turning them into a more loyal fan.

Waiting time was also found to be a significant predictor of perceived service quality. Many of the newer stadiums have addressed this by adding more concession stands and more restroom facilities, especially for female fans. In

addition, stadiums are being built to enhance movement through the stadium and to allow fans to have views of the playing field/floor from concourse areas. Perceptions of waiting time can also be improved by providing parking spaces closer to the stadium or by providing shuttle service from parking lots/offsite parking to the stadium.

The role of the servicescape in a sports context gains added importance when one takes into account involvement, positive effect, and value were all positively and significantly related to behavioral intentions in our study. Thus, it would appear that managers could improve the probability of positive behavioral intentions by enhancing the perceptions of value and positive effect as well as increasing the involvement level of the sports consumer via the enhancement of the servicescape.

4.3. Limitations

This study, like most, suffers from some limitations. First, the data used to test the model was collected at a minor league baseball stadium. This limits the generalizability of the study. While we feel that the sample is representative of the population based on demographic factors, there may be factors that are specific to fans that attend minor league baseball that would cause our results to differ from other minor league or major league sports. Another potential limiting factor is that the stadium where the data was collected is new and has been recognized as one of the better minor league stadiums in the country. This could have influenced the role of the servicescape in this model. Finally, this study only looks at one of many hedonic service industries such that generalizing these results to other services should be approached with caution. This illuminates the need for similar studies focusing on consumer purchase processes for hedonic goods and services.

Appendix A. The measures

A.1. Servicescape

1. In general, _____'s physical environment pleases me.
2. There are enough employees at _____ to service customers.
3. The employees are neat and well dressed.
4. The employees are helpful. *
5. The employees are friendly. *
6. _____'s physical environment is one of the best in its industry. *
7. _____ has more than enough space for me to be comfortable.
8. _____'s customers are neat and well dressed. *
9. _____'s customers are friendly. *
10. I feel like the customers will help me if I need them. *
11. I think that _____'s physical environment is superior.
12. _____ has a pleasant smell.
13. The lighting is excellent at _____.
14. _____ is clean.
15. The temperature at _____ is pleasant. *
16. The background music is appropriate. *
17. The background noise level at _____ is acceptable. *
18. Overall, I would rate _____'s physical environment very highly. *
19. _____'s physical facilities are comfortable.
20. _____'s interior layout is pleasing.
21. The signs used (i.e., bathroom, enter, exit, smoking) are helpful to me. *
22. The restrooms are appropriately designed. *
23. _____'s parking lot has more than enough space. *
24. The color scheme is attractive.
25. The materials used inside _____ are pleasing and of high quality.
26. The architecture is attractive. *
27. The style of the interior accessories is fashionable.
28. Generally, I am impressed with the environment when I go to _____.

A.2. Overall service quality

1. Overall, I have received high quality service at _____ Stadium.
2. Generally, the service provided at _____ Stadium is excellent.

* Indicates items were deleted based on the scale validation procedures.

3. Generally speaking, the service provided at _____ Stadium is superior.
4. Overall, the service provided at _____ is outstanding.
5. I believe the performance of _____'s employees is excellent.

A.3. Overall satisfaction

1. I am happy with the experiences I have had at these games.
2. I have been satisfied with my experiences at these games.
3. I truly enjoy going to these games.
4. I am elated with the experiences I have had at these games.
5. Going to these games has been delightful.

A.4. Behavioral intentions

1. I say positive things about going to _____ baseball games to other people.*
2. I recommend going to _____ baseball games to someone who seeks my advice.*
3. I encourage friends and relatives to go to _____ baseball games.
4. Going to _____ baseball games is my first choice for entertainment.
5. I will go to a _____ baseball game over the next few months.
6. I would continue to go to _____ baseball games if the prices slightly increased.
7. I'd pay a higher price to go to _____ baseball games than I'd pay to go to other stadiums.
8. I like staying at _____ baseball games for long periods of time.
9. I enjoy spending time at _____ baseball games.
10. I frequently stay at _____ baseball games longer than I had planned.

A.5. Value

1. In general, I believe going to _____ baseball games at _____ is worth the cost.
2. I believe that _____ baseball home games are generally a good value.
3. On the whole, the services I purchase while at _____ provide an excellent value.
4. I get good value in going to _____ baseball games.
5. By going to _____ baseball games, I get a lot for my money.

A.6. Waiting time

1. I receive very quick service while at _____ baseball games.
2. During an _____ home baseball game, the time I spend waiting for service is minimal.
3. During the game, _____ Stadium's employees deliver service in a timely manner.
4. I get through the entrance gates very quickly at _____ Stadium.
5. I am able to exit _____ Stadium very quickly.

A.7. Enduring involvement

1. I go to _____ home baseball games quite often.
2. I consider myself very knowledgeable about baseball.
3. I am very familiar with _____ Stadium.
4. I have attended _____ home baseball games frequently over the last few months.

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