Investigating the NBA Servicescape: Fan Involvement, Team Loyalty, Perceptions of Atmospheric Music and Emotional Responses

Crystal Southall  
*Western State Colorado University, crystalsouthall@hotmail.com*

Richard Southall  
*University of South Carolina, Southall@hrsm.sc.edu*

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Investigating the NBA Servicescape: Fan Involvement, Team Loyalty, Perceptions of Atmospheric Music and Emotional Responses

Crystal Southall and Richard M. Southall

ABSTRACT

Within the domain of entertainment and leisure services, sport is a unique experiential service-product. Further, sport consumer behavior has changed dramatically, as advances in technology have decreased barriers to and increased the scope of sport consumption. Sport consumers can now watch live, delayed, or recorded sport events when and where they choose. Therefore, sport organizations must focus on sustainability through the creation of a competitive advantage in the staging of live sport events. Given that the NBA product is consumed within an increasingly stimulating consumptive landscape (Andrews, 2006), this study sought to examine the relationship between NBA fans’ involvement, home-team attitudinal loyalty, perceptions of atmospheric music, and emotional responses to the servicescape. Data were collected, utilizing a cluster sampling procedure, during the 2010-2011 NBA season. Eight hundred, 42-item questionnaires were distributed during two games, a 53% rate of response resulted in the final sample (N = 425). One-way MANOVAs, with follow-up descriptive discriminant analysis, were conducted to analyze the relationship between levels of NBA involvement and attitudinal loyalty to the home team and reported emotional responses to the environment, as well as reported interpretation of the atmospheric music. Results revealed heightened emotional responses among direct consumers. Further, highly involved and loyal participants reported increasingly positive perceptions of atmospheric music. Results support the significant influence servicescape elements have on the live sport-consumption experience.

INTRODUCTION

Within the domain of entertainment and leisure services, sport is a unique experiential and intangible service-product: unpredictable, as well as simultaneously produced and consumed. Given this simultaneous production and consumption, the consumers’ total experience has increased relevance (Bitner, 1992). Therefore the environment, or servicescape, within which the sport product...
is presented, is significantly relevant to consumers’ overall perceptions and opinions about the sport-consumption experience.

Another salient aspect of sport is the limited control sport marketers – and other event management personnel – have over the core sport product: the game itself. Sport organizations control who is on the roster; however, injuries, individual and team performance, and game outcomes are unpredictable and out of organizations’ direct control. According to Mullin, Hardy, and Sutton (2007) the limited control of the sport product is a distinguishing feature of sport marketing. Therefore it is imperative sport marketers understand the servicescape, including atmospheric music, in order to create and increase levels of involvement and loyalty among sport consumers and provide a consistent customer base in times of change, uncertainty, or poor team performance (Funk & Pastore, 2000; Heere & Dickson, 2008; Mahoney, Madrigal, & Howard, 2000).

The purpose of the present study was to examine the relationship between spectators’ involvement with the National Basketball Association (NBA) and the level of attitudinal loyalty to a particular NBA team. Given that increased involvement is a precursor of loyalty, an examination of both constructs was relevant in the present, sport context. Additionally, participants’ levels of involvement and loyalty were utilized to better understand the relationship between participants’ emotional responses to the servicescape and interpretations of the atmospheric music and reported levels of NBA involvement and attitudinal loyalty to the home team.

NBA basketball was chosen for the present study due to the unique nature of the NBA product and its consumers. According to Andrews (2006) the NBA has “successfully blurred the boundaries between the sport, media, and entertainment industries” (p.13). Given the increasingly cluttered sport marketplace, there is also an impetus for many sport organizations to establish a base of loyal consumers in order to grow their fan base and more fully insulate the organization from environmental threats (Amis, Slack & Barrett, 1999).

Given that the NBA product is consumed within an increasingly stimulating consumptive landscape and increased involvement is a precursor of loyalty, an examination of both constructs was relevant in the present, sport context (Andrews, 2006). Additionally, participants’ levels of involvement and loyalty were utilized to better understand the relationship between participants’ emotional responses to the servicescape and interpretations of atmospheric music and reported levels of NBA involvement and attitudinal loyalty to the home team.

Specifically, several hypotheses were formulated to examine these relationships:

**H1**: Participants’ level of NBA involvement will be positively related to levels of arousal and pleasure experienced while in attendance of the game.

**H2**: Participants’ level of loyalty to the home team will be positively related to levels of arousal and pleasure experienced while in attendance of the game.

In addition, given that NBA game re-presentation is increasingly entertainment oriented, with atmospheric music playing a prominent role, the presence of atmospheric music is reported to be salient in eliciting various consumer attitudes and behaviors (e.g., Areni & Kim, 1993; Jacob, 2006; North, Hargreaves, & McKendrick 1999). Therefore, the third and fourth hypotheses focus on the relationship between two factors (NBA involvement and attitudinal loyalty to the home team) and three responses: (1) consumers’ reported levels of “liking” in-game music, (2) perceptions of in-game music as congruent with the NBA’s brand image, and (3) whether the music was deemed to be “distracting”:

**H3**: Participants’ level of NBA involvement will be positively related to the music interpretation scores of liking, congruency and distraction.

**H4**: Participants’ level of loyalty to the home team will be positively related to the music interpretation scores of liking, congruency and distraction.
REVIEW OF LITERATURE

Atmospheric Music

One servicescape element, atmospheric music, has been studied in relation to a wide variety of consumer behaviors and has been shown to influence both approach and avoidance behaviors, such as the amount of time and money spent in various service settings (e.g., Areni & Kim, 1993; Jacob, 2006; Milliman, 1986; North & Hargreaves, 1998; North, Shilcock, & Hargreaves, 2003). Atmospheric music has been shown to be influential in eliciting preferred responses related to involvement levels.

For example, North and colleagues (1999) found the type of music played in a wine store influenced the type of wine purchased. When French music was played there was a significant increase in the amount of French wine sold. Similar results were found when German music was played. The results suggest that when music and product are congruent, the style of music can elicit preferred responses (e.g., purchase of a particular type of wine). The results are also consistent with congruency theory, which states consumer spending is likely to increase when the perceptions of atmospheric music are consistent with perceptions of the service setting (Jacob, 2006).

Consumer behavior research has found that when consumers' have low levels of product involvement, positive feelings (e.g., liking) are more likely to be created with the introduction of stimuli, such as music (Kotler, 1973). Further, when presented with both visual and auditory stimuli (e.g., music), the presence of aural cues act to distract from visual cues (Chebat, Gelinas-Chebat, & Filiatrault, 1993), particularly if the music is perceived to be incongruent with the service-environment (Jacob, 2006; North et al., 1999). Thus, in a highly stimulating environment where multiple forms of stimuli are present, the insertion of atmospheric music may work to distract or divide consumers' attention from visual elements.

The present study examined participants’ perceived levels of congruence, distraction, and overall liking of NBA in-game music. While organizations may not be able to “control” all aspects of the service-environment, one element they can easily control is in-game atmospheric music. Consequently, this study can provide sport marketers with a better understanding of atmospheric music’s influence on consumer attitudes and behaviors.

Involvement and Loyalty

Involvement is a multidimensional and exceedingly complex construct. According to Sherif and Cantril (1974) a highly involved individual is often highly committed to a product, and likely to reject presented alternatives. According to Construal Level Theory (CLT), “...memories, plans, predictions, hopes and counterfactual alternatives populate our emotions and guide our choices and actions” (Trope & Liberman, 2010, p. 440). Related to this study’s purpose, CLT proposes that as the psychological distance of an experience (e.g., the degree of involvement with a product or event) increases or decreases, the formed abstract mental construals become more or less abstract (Trope & Liberman, 2010). A basic assumption of CLT is a consumer retains central features of an object or experience and omits incidental features. In addition, a consumer can be involved, simultaneously, with multiple products, brands, and services at a given time (Havitz & Dimanche, 1999; Kerstetter & Kovich, 1997; Zaichowsky, 1985). Further, involvement levels and formed mental construals may fluctuate over time, dependent on exposure, additional information, and the product’s ability to fulfill specific consumer needs (Funk, 2008).

Several marketing and leisure researchers (Havitz & Dimanche, 1997; Munson & McQuarrie, 1987; Sherif & Cantril, 1974; Zaichkowsky, 1985) have investigated consumer involvement. However,
investigation of sport-consumer involvement, and in particular team-sport spectator involvement, is not as prevalent. This scarcity provides fertile ground for substantive investigation, since an understanding of the relationship between involvement and sport-consumer attitudes and behaviors is just as important to sport marketers and managers as it is to marketers and managers in other retail, service or leisure environments. Recognizing the need to investigate sport-consumer involvement and loyalty, Funk and James (2001) developed the Psychological Continuum Model (PCM) to measure sport fan and spectator involvement (Filo, Funk, & O’Brien, 2009; Funk, 2008). An individual’s PCM profile measures three distinct involvement facets along a continuum: pleasure, centrality, and sign (Funk & James, 2001). The lowest involvement level is simple awareness, characterized by low levels of cognition and attitude formation. At the high end of the continuum, allegiance occurs, resulting in psychological commitment to a sport or event. As individuals’ psychological connections to a sport or event increases, they progress up the continuum, which is understood to represent an increased level of involvement (Funk & James, 2001).

For the purposes of this study, the attitudinal component of loyalty is presented as an individual’s resistance to alterations in their level of psychological commitment (Heere & Dickson, 2008; Pritchard, Havitz, & Howard, 1999). Specific to a team-sport setting, loyalty is not psychological commitment itself, but rather the persistence and strength of commitment to a particular team and therefore is contingent upon the creation of increased levels of involvement (Heere & Dickson, 2008). Attitudinal loyalty is also the result of the interaction between internal psychological processes and connections, and any negative external changes that may occur (Heere & Dickson, 2008).

To measure team loyalty, Heere and Dickson’s (2008) Attitudinal Loyalty to Team Scale (ALTS) was used in the present study. The ALTS is a parsimonious 4-item measure of the psychological connection an individual has to a specific team. As such, the scale is a one-dimensional measure that separates internal psychological connections from behavioral responses in order to measure attitudinal loyalty (Heere & Dickson, 2008). Further, loyalty to a team represents an individual’s resistance to change when presented with alternatives, such as if the team is in a slump, or changes are made to the team’s lineup. Thus, attitudinal loyalty scores may indicate a fan’s level of cognitive affiliation to (e.g., psychological distance from) a particular team, regardless of the team’s performance. Given the unpredictable nature of sport and the sport product, being able to measure such resistance to change is valuable to sport marketers.

**Emotional Responses to the Servicescape**

Bitner (1992) defined servicescape as all aspects of a service environment that can be controlled by a firm. Within the servicescape easily accessible environmental cues are relied upon as significant sources of information when interpreting, making inferences, and ultimately making judgments regarding product/service quality and value (Baker, 1998). In addition, consumer behavior researchers (Bitner, 1992; Falk, Sockel, & Warren, 2005; Namavayam & Mattila, 2007) contend consumers holistically interpret their environment, taking into account all elements present within a given setting. Therefore, elements within the servicescape do not exist as a single entity, but rather as interrelated components that create the total service environment.

Previous studies have demonstrated music levels (e.g., volume and tempo) may influence consumer responses. For example, in a study of grocery store shoppers Milliman (1982) found music tempo influenced time spent in-store. Specifically, slower-paced music lead to an increase in the amount of time spent shopping. Similarly, slow-tempo music increased time spent dining among restaurant patrons, while fast-paced music had the opposite effect (Milliman, 1986).

In light of this research, in the current study, completed surveys were collected at the end of the game and therefore time spent in the environment was assumed to be equal for all participants (i.e.,
the length of the game). Further, measure atmospheric music levels were not controllable, therefore music tempo or volume were not specifically included as variables.

Specific to consumers’ emotional responses, Mehrabian and Russell (1974, 1976) noted such responses result from consumers taking into account all of the various elements present. According to Mehrabian and Russell (1974, 1976) any demonstrated response to a physical setting, or environment, can be categorized as either an approach (e.g., increased time or affiliation) or avoidance (e.g., decreased contact or evasion) behavior. Further, all behaviors can be attributed to emotional states, which are the intervening variables between environmental stimuli and approach or avoidance behaviors (Hines & Mehrabian, 1979; Mehrabian & Russell, 1974). Therefore, in the present study levels of arousal and pleasure were measured using an adapted version of Mehrabian and Russell’s (1974) Semantic Differential Measures of Emotional Response to Environments. Drawing upon Mehrabian and Russell’s (1974, 1976) arousal-pleasure hypothesis, which posits that all approach-avoidance behaviors are related to the two emotional states of arousal and pleasure, the third emotional state of dominance, which was included in the original scale (Mehrabian & Russell, 1974), was not measured in the present study.

The original instrument created by Mehrabian and Russell (1974) that was used as the framework for the present study included 6 word pairs related to dominance, that were excluded from the instrument used in the present study. The state of dominance was later revealed to be inconsequential to approach-avoidance behaviors, as all approach-avoidance behaviors are related to the two emotional states of arousal and pleasure (Mehrabian and Russell, 1976). Within any given environment, approach-avoidance behaviors are correlated to levels of pleasure-displeasure induced by stimuli in the environment, regardless of the type of stimuli or how it is introduced into the environment. Increased levels of pleasure result in approach behaviors that are directly correlated to increased levels of arousal (Hines & Mehrabian, 1979). Further, as pleasure decreases, approach behaviors are also affected resulting in an inverse relationship with arousal levels. Therefore, the third emotional state of dominance, included in the original scale (Mehrabian & Russell, 1974), was not measured in the present study.

Within the sport setting a consumer’s perceptions of a servicescape have been shown to be a determinant of their behavior, particularly when the service is experiential and consumed primarily for hedonistic reasons (Wakefield & Blodgett, 1996). Within the minor league baseball system, Hightower, Brady, and Baker (2002) investigated the relationship between a newly constructed stadium’s servicescape and behavioral intentions. Consistent with previous research (Wakefield & Blodgett, 1994, 1996; Wakefield & Sloan, 1995) servicescape was found to have a significant influence on behavioral intentions, including repurchase and attendance intentions, and intended positive word-of-mouth (Hightower et al., 2002). The servicescape was also shown to significantly influence positive affect, in other words arousal and pleasure. Further, increased levels of involvement were significantly and positively related to perceptions of the servicescape (Hightower et al., 2002). These findings suggest that organizations should analyze their servicescape and strategically manipulate servicescape elements to increase involvement levels among consumers (Hightower et al., 2002).

METHODS

The target population for the present study was individual NBA game attendees over the age of 18. Participants were randomly selected from attendees at two 2010-2011 NBA regular-season games played in Eastern Conference arenas in the southeastern United States.

A sampling frame, utilizing stratified cluster sampling, was applied in order to establish potential participants in the study. Cluster sampling is useful in obtaining a representative sample from a large target population (Huck, 2008). Clusters that contain members of the population are used in order to create an accessible sampling frame. Clusters can be naturally occurring or can be constructed based on proximity or convenience (Som, 1973).
In an effort to obtain a representative cross-section of the target population in the sample frame, clusters for the present study were constructed utilizing randomly selected seating sections in both upper and lower arena levels. In order to include a representative sample from both upper and lower seating sections, 38% (n = 10) of the sections included in the sample frame each game were located in the upper level and 62% (n = 18) were located in the lower level; which represented the approximate distribution of upper and lower seating sections within the arenas.

Each seating section was assigned a numeric identifier, thereby renaming each section in the arena. Private luxury boxes, or suites, were not included in the assignment of numeric identifiers, and therefore, attendees seated in these areas were not included in the sample. Assigned numeric identifiers were not related to the location of the section, as the values were used for identification purposes only and not for selection (Orcher, 2005). Sections were randomly selected through the use of Stat Trek’s electronic random number generator (Stattrek, n.d.). Surveys were then randomly placed in cup holders within each seating section.

**Instrumentation**

The study's survey consisted of seven distinct sections with 42 items. An adaption of Funk and James’ (2001) Psychological Continuum Model (PCM) nine-item, seven-point Likert scale was used to measure participants’ NBA product involvement. PCM “adaption” consisted only of rephrasing each question to reflect this study's setting and purpose. Such adaptation is consistent with Funk and James' intent that PCM verbiage could be adapted and used in various domains to investigate sport participation involvement as well as sport spectator involvement. Items were phrased to reflect an emphasis on an NBA attendee’s involvement. For example, participants were asked to rate their level of agreement with the following statements:

- Attending NBA games plays a central role in my life.
- When I attend NBA games, I am able to act more like myself than in other social settings.

Involvement facet scores were used to determine participants’ associated level of involvement along the psychological connection continuum (Funk & James, 2001). Participants were labeled as belonging to either high (i.e. attachment or allegiance) or low (i.e. awareness or attraction) involved groups.

Heere and Dickson’s (2008) 4-item Attitudinal Loyalty to Team Scale (ALTS) (seven-point Likert scale) was used to measure home-team attitudinal loyalty. Responses to four loyalty measures were rated using a 7-point Likert-type scale (1 = strongly disagree and 7 = strongly agree). Participants’ total scores on the four loyalty items reflected levels of attitudinal loyalty to home team, ranging from 1 to 28. Further, average loyalty scores (1 to 7) were used to place each participant into one of four loyalty groups (absent [M = 1.0 – 2.0], low [M = >2.0 – 4.0], medium [M = >4.0 – 6.0], and high [M = >6.0 – 7.0]). The four atmospheric music questions were based on a review of the literature that identified distraction, congruency and liking to be key elements, as well as an analysis of the results of semi-structured interviews included in a pilot study.

The advertising literature has revealed that when atmospheric music is used to attract the attention of listeners, it should be done so as to direct attention toward the central message or product being presented (Hecker, 1984). Further, atmospheric music is most effective when it is used to enhance the core message or product. According to Chebat, Vaillant, and Gelinas-Chebat (2000), if listeners focus too much attention on atmospheric music, it can have a distracting effect, thus taking away from the cognitive processing of the message central to the product. Further, when music and visual stimuli are presented simultaneously, the very presence of auditory stimuli is likely to have a distracting effect from the processing of visual stimuli (Chebat et al., 1993; 2000). Thus, atmospheric music can work to enhance or distract attention. Within the experiential sport setting, atmospheric
music should be used to enhance the experience of the sport consumer, so as not to compete with the sport product and thus be characterized as a distraction.

Participants thus were asked to report the extent to which they felt the atmospheric music was a distraction from the game, or core product. Further, given that sport consumption is a communal experience, participants were also asked to rate the extent to which they felt the music interfered with social interaction. Given the disparate nature of watching the game and conversing/interacting with others, two distraction-specific questions were created:

- Distraction 1: The music interfered with my ability to interact and converse with those around me.
- Distraction 2: The music distracted me from watching the game being played.

Congruency of atmospheric music with the service setting has been shown in the literature to influence consumer attitudes and behaviors (Jacob, 2006; North et al., 1999; 2003). Music has also been shown to have the most significant impact on consumer purchasing behavior when atmospheric music is congruent with the experiential environment (Jacob, 2006; North et al., 1999). Congruency involves examining whether the style of music presented is consistent with the organization or event's expressed image. Further, congruency seeks to determine the extent to which the style of the music is in keeping with the type of music consumers’ expect to be associated with the organization.

- Congruent: The music played during the game was the type I associate with the NBA.

It has been posited in the atmospheric music literature that individuals’ musical preference may influence emotional responses to the service setting (e.g., Guégen, Hélène, & Jacob, 2004). Given that individual musical preferences, or whether or not one likes the atmospheric music, can influence responses this variable should be considered when trying to explain consumer attitudes and behaviors within the experiential sport setting. Therefore, participants were asked to report the degree to which they liked the music being played during the event.

- Liking: I liked the type of music being played during the game.

Mehrabian and Russell’s (1974) Semantic Differential Measures of Emotional Response to Environments was used to measure participants’ levels of arousal and pleasure, as induced by stimuli in the environment. Each emotional state was gauged based on responses to six respective adjective pairs, presented in the form of a semantic differential scale (+3 to -3 numerical score). Given that emotional responses evoked by atmospheric music in the servicescape have been shown to influence consumer attitudes and behaviors (Kotler, 1973), participants’ perceptions of the in-game atmospheric music were measured based on responses to four questions that gauged the respondents' perceived congruency, distraction, and “liking” of the music.

**Procedures and Analysis**

Based on the previously described stratified cluster sampling procedure, paper/pencil surveys were distributed and completed by spectators in randomly selected sections at two NBA games during the 2010-2011 NBA-season. The researcher, along with a supporting research team, was onsite to distribute, administer, and collect surveys.

One-way MANOVAs were performed to determine if differences existed between levels of an independent variable on a specified vector of dependent variables to test the first two hypotheses (Tabachnik & Fidell, 2001). Participants’ levels of NBA involvement (high v. low involved) and levels of attitudinal loyalty to the home team (high, medium, low, or absent) were used as independent variables, while the dependent variables of interest were participants’ arousal and pleasure scores as determined by responses to Mehrabian and Russell’s (1974) Semantic Differential Measures of Emotional Response to Environments scale.
Descriptive discriminant analysis (DDA) was utilized as a follow-up procedure to both MANOVA analyses to determine which of the dependent variables were most responsible for group separation (Tabachnick & Fidell, 2001). F to remove values was reported to identify variables that contributed the most to differences in loyalty and involvement group membership. Pearson coefficients, as presented in the structure matrix, were also used to identify variables that were significant in defining the emotional response factor based on respective loadings. Since a loading of (.33) is generally accepted as the cut-off between prime and non-prime variable loadings, it was used to identify significant variables (Tabachnick & Fidell, 2001).

The final two hypotheses were also tested using a one-way MANOVA. Involvement and loyalty levels were again used as independent variables of interest, as measured by the PCM (Funk & James, 2001) and ALTS (Heere & Dickson, 2008) scales. Dependent variables in both analyses were participants’ atmospheric interpretation scores as indicated by responses to congruency, distraction, and liking of music survey questions. Descriptive discriminant analysis was again used as a follow-up procedure to each MANOVA. F to remove values for music interpretation variables were utilized to identify which of the factor variables contributed the most to differences in loyalty and involvement group membership.

RESULTS

A total of 800 surveys (400 each game) were distributed during two NBA games. The study’s usable sample (N = 425 completed surveys, 53% overall response rate) was just above the conservative estimate of 50% assumed for the present study. Individual game samples were: first game (n = 194, 46%) and second game (n = 231, 54%).

Forty-seven percent (n = 199) of respondents were seated in the arenas’ “lower bowls,” while 53% (n = 226) had seats located in the upper bowls. Consistent with Schnietz and colleague’s (2005) select NBA fan demographics, this study’s “average” participant was a white (57%) male (61%) with either a bachelor’s (33%) or graduate (24%) degree. Further, 51% of this study’s respondents were married, with 34% earning more than $100,000 annually. For more in-depth study-participant demographic information, see Table 1.
Table 1. Demographic Information of Current Sample (N = 425)

<table>
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<tr>
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<td>22</td>
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<tr>
<td>20-40K</td>
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<td>13</td>
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<tr>
<td>40-60K</td>
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<td>12</td>
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<tr>
<td>&gt;80K</td>
<td>198</td>
<td>47</td>
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</table>

The reported average number of NBA games attended in a typical season was eight games, with 33% (n = 139) participants typically attending one game a season. Seventy-seven percent (n = 327) reported low levels of involvement with the NBA, with the remaining 23% (n = 98) having high involvement levels. Forty-two percent of respondents (n = 176) displayed low (n = 122) or absent (n = 54) levels of attitudinal loyalty to the home team. Additionally, 41% (n = 172) and 18% (n = 77) reported medium and high levels of attitudinal loyalty, respectively. Prior to running statistical analyses to address the hypotheses, the internal consistency reliability of the involvement, loyalty, and emotional responses to the environment scale was also estimated.
First, Cronbach alpha reliability estimate was examined for the adapted version of Mehrabian and Russell’s (1974) Semantic Differential Measures of Emotional Response to Environments scale. Results ($\alpha = .86$) revealed, for the present sample, reported arousal and pleasure scores were internally consistent. Descriptive analysis of involvement group membership and emotional response to the servicescape scores further revealed participants with high levels of NBA involvement appeared to report higher levels of arousal ($M = 5.13; SD = 6.11$) and pleasure ($M = 7.36; SD = 7.36$) than their low-involved counterparts (See Table 2).

### Table 2. Mean Arousal and Pleasure Scores by Involvement Group

<table>
<thead>
<tr>
<th>Involvement Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>327</td>
<td>1.80</td>
<td>6.246</td>
<td>4.99</td>
<td>6.537</td>
</tr>
<tr>
<td>High</td>
<td>98</td>
<td>5.13</td>
<td>6.113</td>
<td>7.36</td>
<td>7.359</td>
</tr>
</tbody>
</table>

Note. Mean scores represent summed scores gauged in response to twelve semantic differential word-pairs contained on the Emotional Responses to Environments Scale (Mehrabian & Russell, 1974)

One-way MANOVA results revealed a significant main effect of the independent variable (involvement) on the set of servicescape variables (arousal and pleasure), $F (2, 423) = 11.23, p < .001$, Wilk’s $\lambda = .949$. The results reflect a moderate association between involvement (high vs. low) and the combined servicescape variables, partial $\eta^2 = .05$ (Huck, 2008). Results support the first hypothesis, which predicted a relationship between participants’ levels of involvement and emotional responses experienced during an NBA game.

Next, a descriptive discriminant analysis was conducted to better understand differences in involvement group membership. F to remove values revealed that arousal, $F = 12.898$, contributed more than pleasure, $F = .709$, to differences in involvement. Further analysis of the structure matrix revealed that both arousal (.983) and pleasure (.644) seem to be meaningful variables in defining the emotional responses to the servicescape factor.

Preliminary analysis revealed mean differences between loyalty groups and emotional responses to the environment. Participants with high levels of attitudinal loyalty reported higher levels of both arousal ($M = 6.55; SD = 5.03$) and pleasure ($M = 8.58; SD = 6.88$) than participants who reported lower levels of attitudinal loyalty (See Table 3). Further, it appears that as loyalty increases, so too do levels of arousal and pleasure.

### Table 3. Mean Arousal and Pleasure Scores by Loyalty Group

<table>
<thead>
<tr>
<th>Loyalty Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absent</td>
<td>54</td>
<td>-.31</td>
<td>6.404</td>
<td>3.89</td>
<td>5.182</td>
</tr>
<tr>
<td>Low</td>
<td>122</td>
<td>1.73</td>
<td>5.200</td>
<td>4.54</td>
<td>5.993</td>
</tr>
<tr>
<td>Medium</td>
<td>172</td>
<td>2.28</td>
<td>6.859</td>
<td>5.41</td>
<td>7.358</td>
</tr>
<tr>
<td>High</td>
<td>77</td>
<td>6.55</td>
<td>5.033</td>
<td>8.58</td>
<td>6.877</td>
</tr>
</tbody>
</table>

Note. Mean scores represent summed scores gauged in response to twelve semantic differential word-pairs contained on the Emotional Responses to Environments Scale (Mehrabian & Russell, 1974)
One-way MANOVA revealed a significant multivariate main effect for loyalty, $F (6, 840) = 8.34, p < .001$, Wilk’s $\lambda = .891$, on the combined servicescape variables. Results also indicated a moderate association between level of team loyalty (absent, low, medium, and high) and servicescape, partial $\eta^2 = .06$. Results support the second hypothesis, as there was a significant relationship revealed between participants’ levels of involvement and emotional responses experienced during an NBA game. That is, there was a statistically significant difference between participants’ level of involvement on the linear composite of arousal and pleasure scores.

Descriptive discriminant analysis was next conducted to better describe the differences between levels of loyalty to the home team, using arousal and pleasure scores as discriminating variables. Analysis of $F$ to remove values revealed that arousal, $F = 9.250$, contributed more than pleasure, $F = 1.007$, to differences in loyalty. Analysis of the structure matrix further revealed both arousal (.976) and pleasure (.656) as salient variables in defining the emotional responses to the servicescape factor.

Descriptive analysis of music scores revealed high (M =5.49; SD = 3.75) and low (M =5.94; SD = 3.51) involved participants reported similar music distraction scores. Mean differences were seemingly revealed between involvement groups and both atmospheric music congruency and liking. The high-involved group mean on both factors was higher than the low-involved group (See Table 4). The variability of the two involvement groups on the three music interpretation factors also appeared to be similar.

Table 4. Atmospheric Music Interpretation Scores by Involvement Group

<table>
<thead>
<tr>
<th>Involvement Group</th>
<th>Distracting</th>
<th>Congruent</th>
<th>Liking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Low</td>
<td>327</td>
<td>5.94</td>
<td>3.506</td>
</tr>
<tr>
<td>High</td>
<td>98</td>
<td>5.49</td>
<td>3.745</td>
</tr>
</tbody>
</table>

Note. Mean scores represent summed scores in response to four Likert-type questions (1 = strongly disagree and 7 = strongly agree) contained to measure perceptions of atmospheric music distraction, congruency and liking.

One-way MANOVA revealed a significant multivariate main effect for involvement, $F (4, 420) = 3.160, p < .01$, Wilk’s $\lambda = .971$, on the set of atmospheric music dependent variables. The results reflect a modest association between involvement (high vs. low) and grouped music interpretation scores, partial $\eta^2 = .03$. As predicted, there was a relationship between participants’ levels of involvement and perceptions of music played during the NBA game. That is, there was a positive relationship between participants’ level of involvement and the linear composite of music congruency, liking, and distraction scores grouped together.

Follow-up descriptive discriminant analysis was conducted to better understand separation in involvement group membership. Results revealed the music variables of liking, $F = 1.905$, and congruency, $F = 1.779$, contributed more to differences in NBA involvement than variables representing music as a distraction from interaction, $F = .181$, and distraction from the game, $F = .528$, which were revealed to be less influential contributors to differences in levels of involvement. The structure matrix also revealed that the two variables of music liking (.901) and congruency (.869) appear to be the music variables that are the most salient in defining the music interpretation factor as well as differences in levels of involvement.
Initial descriptive analysis revealed similar mean ratings of music distraction for participants in disparate loyalty groups. Regardless of the level of loyalty to the home team, participants seemed to perceive the atmospheric music as a distracting servicescape element. Although there were no noticeable mean differences on distraction scores, music interpretation scores did reveal a positive relationship between team loyalty and music liking. That is, participants with higher levels of attitudinal loyalty appeared to enjoy the atmospheric music at higher levels than participants’ displaying lower levels loyalty to the home team (See Table 5). A similar positive relationship also appears to exist between levels of loyalty and perceptions of music congruency.

### Table 5. Mean Atmospheric Music Interpretation Scores by Loyalty Group

<table>
<thead>
<tr>
<th>Loyalty Group</th>
<th>N</th>
<th>Distracting</th>
<th></th>
<th>Liking</th>
<th></th>
<th>Congruent</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Absent</td>
<td>54</td>
<td>5.06</td>
<td>3.563</td>
<td>4.19</td>
<td>2.548</td>
<td>3.94</td>
<td>2.310</td>
</tr>
<tr>
<td>Low</td>
<td>122</td>
<td>6.16</td>
<td>3.874</td>
<td>4.52</td>
<td>2.125</td>
<td>4.89</td>
<td>1.995</td>
</tr>
<tr>
<td>Medium</td>
<td>172</td>
<td>5.90</td>
<td>3.290</td>
<td>5.05</td>
<td>1.806</td>
<td>4.98</td>
<td>1.803</td>
</tr>
<tr>
<td>High</td>
<td>77</td>
<td>5.74</td>
<td>3.622</td>
<td>5.05</td>
<td>1.761</td>
<td>5.10</td>
<td>1.832</td>
</tr>
</tbody>
</table>

Additionally, there were differences on reported levels of perceived atmospheric music congruency based on participants' level of attitudinal loyalty. In particular, there were mean differences between participants’ with absent loyalty to the home team and all three other loyalty groups (low, medium, and high) on congruency interpretation scores. That is, participants with no reported attitudinal loyalty to the home team reported lower levels of perceived atmospheric congruency than participants with higher reported levels of loyalty (See Table 5).

Results of the one-way MANOVA revealed, a significant multivariate main effect for loyalty, $F(4, 420) = 3.160, p < .001$, Wilk's $\lambda = .942$, of the linear composite of music interpretation variables. Results also revealed a weak association between loyalty (absent, low, medium, and high) and grouped music interpretation scores, partial $\eta^2 = .02$. The fourth hypothesis was thus also confirmed, given the significance of the overall test. In-line with results supporting the third hypothesis, there were statistically significant relationship between levels of attitudinal loyalty to the home team and the linear composite of atmospheric music interpretation scores.

Follow-up descriptive discriminant analysis was conducted to interpret separation among loyalty groupings (absent, low, medium, and high) based on music interpretation scores. Results of the analysis revealed high F-to-remove values for all four music interpretation variables. Music as a distraction from interaction, $F = 3.522$, and distraction from the game, $F = 3.154$, were revealed to be the most influential contributors to differences in levels of loyalty. Music congruency, $F = 2.444$ and liking, $F = 2.007$, were shown to also have high F values, but to be less influential on differences in loyalty. Further analysis of the structure matrix revealed the two variables of music congruency (.769) and distraction from interaction (.497) as the variables most responsible for defining the underlying linear composite of atmospheric music interpretation scores.

**DISCUSSION**

Results of the present study support previous research of consumer’s emotional responses in various service environments. The significantly higher levels of arousal and pleasure experienced by highly involved and loyal participants, as revealed in the first and second hypotheses, is consistent with the consumer-behavior literature (Hightower et al., 2002; Hines & Mehrabian, 1979; Wakefield &
Blodgett, 1994, 1996; Wakefield & Sloan, 1995). In addition, increased levels of arousal have been shown to result in the increased prevalence of approach behaviors, which may include an increase in the length of time spent in an environment, as well as increased affiliation, verbal and nonverbal communication with those who are present in the environment (Hines & Mehrabian, 1979; Magnini & Parker, 2009; Booms & Bitner, 1980).

These results confirm previous research on atmospheric music’s impact on consumers. The consumer behavior literature provides insight into the atmospheric music interpretation results, in particular participants’ distraction scores as revealed in the analyses investigating the third and fourth hypotheses. The reported overall distracting effect of atmospheric by participants supports the divergent effect atmospheric music may have in an already stimulating environment (Chebat et al., 1993).

This study provides professional sport leagues, particularly the NBA, as well as individual franchises an opportunity to maximize the potential benefits to be derived from an optimally constructed servicescape. Experiential service environments are increasingly important to contemporary sport consumption. The sport product is no longer confined to the court; it includes the entire servicescape. This reproduced ancillary experience is an important – and controllable – sport-product element.

Clearly, atmospheric music is a servicescape element that has a tangible impact on consumer attitudes and behaviors. If the NBA is to fully embrace the representation and consumption of an extended sport product, the league and its teams must systematically evaluate chosen atmospheric music. The final two hypotheses revealed participants “liked” the style of music played and found it to be congruent with their perceptions of the NBA product. However, participants also felt the music could be a distraction from the game as well as their ability to socialize. Therefore, teams should closely evaluate the type or style, as well as level and duration of music, since consumers’ perceptions of atmospheric music have been shown to influence both attitudes and behaviors (e.g., Areni & Kim, 1993; North & Hargreaves, 2003; North et al., 1999).

Additionally, given that live-sport consumption has become increasingly a social experience, sport marketers must not overlook this element as they seek to manipulate the servicescape. Consistent with Chebat et al. (1993), this study revealed a significant portion of participants felt atmospheric music interfered or detracted from their ability to converse and interact with those around them. Since introduction of aural stimuli in an already visual stimulating sport-event environment may work to distract consumers, when there is low product involvement the music played should be congruent with the sport and work to enhance an increasingly social experience (Kotler, 1973). The ultimate goal of sport marketers is to create and sustain a loyal base of fans. Given the unique and transient nature of the core sport product, creating a strong sport brand, or building brand equity, is the foundation upon which to build a fan-base resistant to change or unlikely to be swayed by alternative entertainment opportunities. Since high levels of involvement are requisite to establishing loyalty, the ultimate goal of the sport marketer, sport marketers should work to control the service environment in order to increase sport-consumers’ levels of pleasure and arousal, thereby increasing the prevalence of approach behaviors, which mirror indicators of increased involvement (e.g., increased duration, frequency and affiliation).

In conclusion, the results of this study serve to reinforce the positive relationship between involvement and loyalty (Funk, 2008; Funk et al., 2004). In addition, findings also appear to be support previous research analyzing the influence the servicescape (Hightower et al., 2002; Wakefield & Blodgett, 1994, 1996; Wakefield & Sloan, 1995), as well as atmospheric music (Jacob, 2006; Milliman, 1986; North & Hargreaves, 1998; North et al., 2003), has on creating emotional responses amongst consumers, which ultimately influence behavioral responses (e.g., time allocated, affiliation, repurchase).
This study's design was cross-sectional in nature and served as a limiting factor; only NBA consumers were participants. NBA consumers are not the only group that displays disparate levels of involvement and loyalty to a particular sport or team. Further, NBA games themselves are not the only form of sport produced and consumed by fans in an experiential environment. In addition, we note that while demand was not overtly measured, loyalty to home team and NBA involvement could be considered surrogate measures of demand. Particularly given that the loyalty measure specifically speaks to record/performance and the PCM measures attitudinal, behavioral and cognitive involvement. In other words subjects’ reported state of interest, arousal or motivation could be influenced by local fans motivation for attending the sampled games because of the scheduled opponent (Havitz & Dimanche, 1997). This variable could impact home-team loyalty.

Therefore, further research should be conducted at several more NBA arenas. In addition, fans from other professional and collegiate sporting events should be surveyed. Additionally, it would be intriguing to compare and contrast consumer behavioral and attitudinal variables among various professional and collegiate sports within various types of service environments. Given that the sport industry is consumer driven and the live sport product is fundamentally a service, continued research into sport-consumer attitudes and behaviors is essential. Finally, and perhaps most importantly, inquiries focusing on the impact of distinct elements within the sport servicescape are necessary, since such research is clearly currently lacking.

REFERENCES


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**ABOUT THE AUTHORS**

Crystal Southall is a Lecturer in the Department of Recreation, Exercise & Sports Science, Western State Colorado University.

Richard M. Southall is an Associate Professor in the Department of Sport and Entertainment Management, University of South Carolina.