BUILDING SPORT BRANDS WITH MUSIC: THE IMPACT OF SPORT BRAND MUSIC ON THE SHOPPING BEHAVIORS OF SPORT CONSUMERS

A Dissertation

by

KHALID WALID BALLOULI

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2011

Major Subject: Kinesiology

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Approved by:

Chair of Committee,	Gregg Bennett
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ABSTRACT

Building Sport Brands with Music: The Impact of Sport Brand Music
on the Shopping Behaviors of Sport Consumers. (August 2011)
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This study examines the effects of sport brand music on the shopping behaviors of sport consumers. Sport brand music is custom-designed music that embodies the attributes and characteristics of the sport brand, and plays a formative role in priming concepts related to the sport brand in the minds of sport consumers. Since sport brand music features song lyrics directly related to the sport brand, the purpose of this research is to examine the effects of sport brand music on shopping-related outcomes in a sport brand's online retail store. Specifically, it is hypothesized that sport brand music would have a positive influence on sport consumers' perceptions of musical fit with the sport brand, which would then lead to positive effects on various shopping behaviors.

A quantitative research design in the form of a laboratory experiment is utilized in this study. Study participants (N=250) are randomly assigned to different shopping scenarios in which two different types of background music (sport brand music or popular music) was played. The shopping scenarios employed in this research involve detailed shopping tasks that took place in a "live" online retail store. After completing

the shopping task, participants are asked to answer questionnaire items via Qualtrics online survey software.

Structural equation modeling is utilized to investigate a series of the testable hypotheses. Assessment of goodness-of-fit for the model reveals that all variables load as expected. Evaluation of the findings shows that participants assigned to the shopping scenario in which sport brand music was played demonstrated more favorable perceptions of musical fit and more positive outcome behaviors than did participants who experienced popular music while shopping. Details of this research, as well as research limitations, study implications, and future directions, are forwarded.

DEDICATION

For my parents, Walid and Candice Ballouli

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TABLE OF CONTENTS

CHAPTER Page

LIST OF FIGURES

LIST OF TABLES

CHAPTER I

INTRODUCTION

Brand managers have long influenced the thoughts of consumers by using traditional media channels (e.g., radio and television) as effective means for brand-related communication (Shultz & Barnes, 1999). Over the years, however, media channels have become saturated with marketing clutter (Petty, 2000), making it difficult for brands to obtain a competitive advantage (Goldman & Papson, 2006). Moreover, the unrestricted proliferation of advertising in the marketplace has led to an overall negative perception of marketing tactics among consumers (Calfee & Ringold, 1994; Drumwright & Murphy, 2009; Obermiller, Spangenberg, & MacLachlan, 2005; Sheth, Sisodia, & Barbulescu, 2006). As such, some scholars have suggested that the marketplace is now "more complex, making it harder and harder for a brand to make meaningful connections with consumers" (Collins, 2003, p. 444). However, modern forms of brand communication in the sport and entertainment industry have recently emerged to challenge this view in an unprecedented way (Santomier, 2009). For instance, brand managers have turned their attention to new media, including mobile, digital, and online platforms, as alternative ways to reach consumers amid an inconvenient, yet prevailing, reality of marketing in the modern era (Karrh, McKee, & Pardun, 2003).

Recently, the nature of branding has evolved and become more sophisticated, shifting its focus from tangible aspects, such as name and logo, to intangible elements,

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This dissertation follows the style of *Journal of Sport Management*.

such as personality and image (Aaker, 1996; Keller, 1998). In addition, managers have also created a stronger emotional connection with consumers by using more highly developed forms of brand communication. To illustrate this point, evidence is drawn from the sport and entertainment industry where firms have been quick to adopt entire programs built around the integration of brand identities into places of culture where sport and entertainment converge. The outcome is a concept that scholars in the field are calling "branded entertainment" (Grainge, 2008; Jackson, 2003). Hudson and Hudson (2006) define branded entertainment as "the integration of advertising into entertainment content, whereby brands are embedded into storylines of a film, television program, or other entertainment medium" (p. 492). Researchers formerly used the concept to explain how product placement, long used in novels and film, generated public exposure that drove increased product sales for companies (Karrh, 1998; Karrh, McKee, & Pardun, 2003; Lehu, 2007). More recently, however, branded entertainment has expanded from its novel origins into various forms of new media, including video games, mobile applications, and interactive audio (Lehu, 2007). The latter of these seems especially promising in the context of sport and entertainment, as many college and professional sports teams are beginning to integrate their brand identities into custom proprietary music referred to here as "sport brand music."

In recent years, the prevalent use of music in the marketplace has become an increasingly important aspect of brand communication (Lindstrom, 2005; Schmitt & Simonson, 1997). Balmer and Gray (2003) suggest that music can be one "brand signifier" among other strategies (e.g., name, logo, and colors) used to ensure the stable

and consistent delivery of brand messages (p. 989). Some researchers have coined the term "sonic branding" to describe this emerging field of study and practice (Fulberg, 2003; Jackson, 2003; Treasure, 2007). Sonic branding, a unique and modern form of branded entertainment, is of significant importance to academics and practitioners alike. It involves the strategic use of music, sound, or voice within the framework of brand communication to create an authentic brand identity through audio (Jackson, 2003). Much like visual branding, sonic branding synchronizes brand identities into an aural form that is both distinct and recognizable to the brand. More important, however, is the observation that aural forms of branding can create more memorable brand experiences and longer lasting brand impressions in the minds of consumers (Fulberg, 2003; Jackson, 2003; Lusensky, 2010; Treasure, 2007). As a result, more and more firms are developing innovative and integrative "sonic languages" devoted solely to the communication of brand messages across marketing channels (Jackson, 2003, p. 124). However, despite such efforts, there remains "a certain lack of confidence and methodological clarity in dealing with sound within professional communication" (Bronner & Hirt, 2009, p. 19).

Statement of the Problem

While the use of music as a marketing vehicle appears to be increasingly prevalent in industry (Bruner, 1990), there is a notable lack of scholarly contributions to the literature where sonic branding is concerned. However, the limited research that does exist (e.g., Fulberg, 2003) points to significant possibilities for made-to-order brand

music to positively influence consumer behavior. The construction of brand music involves a process by which brands partner with music artists to create original and custom music that—while appealing to a diverse group of consumers—reflects the values and personalities that are unique to the brand (Lusensky, 2010). Perhaps most important to the construction of sport brand music is the integration of brand-related concepts and meanings into song lyrics (Fulberg, 2003; Jackson, 2003). In the past, managers have had to gain rights to use popular music that in some way, albeit indirectly, reflected the attributes and characteristics of their brand.

In 2011, for example, the National Football League (NFL) hosted the AFC Championship football game between the Pittsburgh Steelers and New York Jets at Heinz Field in Pittsburgh. Prior to the start of the game, the home team Steelers invited local rap artist and Pittsburgh native Wiz Khalifa to perform live on the field as part of pre-game entertainment. Khalifa had already made a name for himself in the music industry by writing and producing a song titled "Black and Yellow," which pays homage to the rapper's hometown and Pittsburgh's team colors (Krumboltz, 2011). Though its lyrics do not contain any words that specifically identify the Steelers, the repeated use of the phrase "black and yellow" in the chorus was evidently reflective of the brand to the extent that the team adopted the song and featured it during home games throughout the season. More notably, however, was the distinct and dominant use of the phrase "black and yellow," which all but eliminated the chances that other NFL teams would also use the song for their own marketing purposes. Whereas traditional product brands seldom

find music featuring the blatant use of their brand name and likeness in song lyrics, examples such as this are becoming more and more common in the sport industry.

While sport teams have traditionally used popular music to enhance the brand experience for sport consumers, a more recent trend points toward a focused partnership between sport teams and music artists to create an audio identity that reflects the unique values and personality of the team's brand. Until recently, much of the music heard in sport settings has largely been paid for through licensing contracts between the sport team and music artist. However, rather than being restricted to costly licensing fees, some sport teams have opted to design and construct their own brand music. For example, the Ohio State University athletic department recently collaborated with popular local music artists to create an entire 11-song album featuring original music tailored song lyrics. Songs on the album were written and recorded specifically for the Scarlet and Gray, and included titles like "The Buckeye Way," "Ohio, On & On," and "Buckeye Land." Some scholars have suggested that such efforts should enhance the brand experience, provide a lasting reminder of the brand's existence, and promote loyalty among consumers (Fulberg, 2003; Jackson, 2003; Lusensky, 2010).

Previous studies on the effects of music have focused almost entirely on the influence of style and genre on consumers' attitudes and behaviors (see Bruner, 1990; Garlin & Owen, 2006; Kellaris, 2008). To date, however, research on the effects of music has largely failed to assess the impact of song lyrics in the same regard (Oakes, 2000). This void in the literature is significant from both a theoretical and practical standpoint. Kellaris and Kent (1991) note that song lyrics have the unique ability to

make meaningful relations to specific concepts and constructs in the minds of consumers. In addition, Redker and Gibson (2009) argue that song lyrics "could play a role in altering brand-related attitudes in a more enduring fashion" (p. 2690). As such, this study was undertaken to understand the effects of sport brand music on sport consumer behavior. In particular, main purpose of this research is to examine how sport brand music affects sport consumers' perceptions and attitudes in an online shopping environment. To fulfill this agenda, a web-based experiment was employed in which two types of music (i.e., sport brand music and popular music) were manipulated in the background of a professional sport team's online retail store. Prior researchers have commonly used retail stores to examine the effects of background music on consumer behavior (Bruner, 1990). In addition, researchers argue that online retail stores provide conditions for a suitably controlled online experiment (Eroglu, Machleit, & Davis, 2001; 2003). To this end, Haubl and Trifts (2000) suggest that the online shopping environment provides a controlled setting in which study participants can be accurately observed yet not perceive any controls as unnatural.

Theoretical Background

At issue in this research are the theoretical perspectives of conceptual fluency and semantic-level processing. Conceptual fluency involves the ease and accuracy with which a target comes to consumers' minds (Danesi, 1995; Hamann, 1990). To this end, Tversky and Kahneman (1974) argue that individuals often make judgments and decisions based on whether associations and relationships among concepts are tightly

linked. Thus, scholars assume that a conceptually fluent stimulus in a shopping environment is one that comes to mind readily and is easy to process (Lee & Labroo, 2004). As such, it is argued here that sport brand music—consisting of lyrics easily grasped (i.e., conceptually fluent) in sport brand settings—will come to mind more readily and will be easier to process in a sport brand store than will popular music.

Shapiro (1999) suggests that conceptual fluency is a function of high-level semantic associations related to a stimulus. Therefore, if we consider the numerous stimuli present in shopping environments, we can assume that conceptual fluency is a factor of present circumstances in online retail stores. Previous research indicates that evaluations of an online store are more favorable when environmental stimuli are conceptually fluent with their expectations during the shopping experience (Moore, Stammerjohan, & Coulter, 2005). In addition, Whittlesea (1993) suggests that people expect to experience certain stimuli in specific environments. For example, patrons of an Italian restaurant might expect to hear Italian music played while they dine. In contrast, sport spectators would not expect to hear Italian music played during any part of a college basketball game. Therefore, it makes sense that sport brand music should be more conceptually fluent than popular music in the setting of a sport brand store, leading to more efficient processing of environmental stimuli among shoppers.

Put simply, the principles of conceptual fluency suggest that particular words (e.g., lyrics) may enhance an individual's overall recognition and processing of specific concepts (e.g., brand) when they are congruent and predictable with the context setting. Sartori and Lombardi's (2004) research built on these principles and introduced a theory

of semantic relevance, which takes into account the extent to which a semantic feature (i.e., a single word or combination of words) contributes to an individual's overall recognition and understanding of a particular concept. The central claim of semantic relevance is that certain semantic features are considered more important in relaying concept information. To illustrate this point, Sartori and Lombardi (2004) offer the following:

> The "core" meaning of a concept is thought to include those semantic features that enable to identify the concept (and to discriminate it from other similar concepts). We assume that subjects' verbal description may be used to derive these important features. For example, "has a trunk" is a semantic feature of high relevance for the concept *elephant* because most subjects use it to define *elephant*, whereas very few use the same feature to define other concepts. "Has 4 legs," on the other hand, is a semantic feature with lower relevance for the same concept because few subjects use it in the definition of *elephant* while using it in defining many other concepts. (p. 439; italics in the original)

By this illustration, one concept may be comprised of countless semantic features, but only a few that are truly useful in identifying the concept before other closely related concepts. In order for a semantic feature to be useful in concept retrieval, the semantic relevance for the feature must have high scores on two different semantic components: dominance and distinctiveness. Semantic features that have high dominance scores for a concept are those that individuals cite regularly in the concept's definition. Semantic features that score high on distinctiveness for a concept are those that individuals seldom

cite in defining other concepts. Therefore, semantic features that exhibit high scores on both components are likely to facilitate communication with greater efficiency (Sartori & Lombardi, 2004).

Grimes (2008) notes that conceptual fluency "is likely to be enhanced by the inclusion of context information that facilitates identification of the brand and therefore increases the likelihood of associations being activated in memory" (p. 79). In addition, Westermann (2008) postulates that dialog systems (e.g., music) consisting of semantic representations of a brand may lead to more favorable consumer attitudes and responses. Similarly, studies show that conceptual fluency can lead to favorable evaluations of an advertisement and positive attitudes toward a brand (Lee & Labroo, 2004). To this end, Lee and Labroo (2004) state the following:

> [W]hen a target comes to mind more readily and becomes conceptually fluent, as when it is presented in a predictive context (e.g., a bottle of beer featured in an advertisement that shows a man entering a bar) or when it is primed by a related construct (e.g., an image of ketchup following an advertisement of mayonnaise), participants develop more favorable attitudes toward the target. It is believed that positive valence of fluent processing underlies these processing-fluency effects. When conceptual fluency is associated with negative valence (e.g., hair conditioner primed by a lice-killing shampoo), the authors observe less favorable attitudes. (p. 151)

More recently, Labroo and Lee (2006) observed that conceptual fluency of a brand could be enhanced when individuals are exposed to concepts related to the brand. Therefore, it

is assumed that sport brand music can have a formative role in priming team-related concepts in the minds of sport consumers while at the same time embodying brand attributes and characteristics.

Research Questions

The research questions that motivate this study are as follows: What are the effects of brand music on consumer perceptions of musical fit? What are the effects of brand music on shopping outcomes, such as evaluations of the store, attitudes toward the brand, and purchase intentions? How do consumer perceptions and shopping outcomes differ between individuals who experience brand music and those who experience popular music in an online retail store? To what extent do the effects of brand music depend on an individual's responsiveness to atmospheric features (e.g., colors, sounds, scents) in the shopping environment?

Rationale for the Study

Numerous opportunities for behavioral research on the nexus of sport and entertainment currently exist. While these opportunities exist, there is an imminent need for clearer understanding of the dynamics involved in the relationship between sport teams, music, and sport consumers. While previous researchers have investigated the effects of brand entertainment in various other contexts, the phenomenon of brand music has not been fully considered in sport contexts. Interestingly, despite the prevalent use of music by both professional and college sport teams, much of the discussion on sport

consumer behavior has ignored music as a means for effective brand communication (Snyder, 1993). According to Areni & Kim (2003), explaining the impact of music on consumers' attitudes and behaviors is indispensible in today's marketplace because it provides a means of improving marketing communication and strategy. Thus, it is important to address this gap in the sport marketing literature.

Over the past few decades, sport teams have begun to use music in more dexterous and effective ways, therefore buttressing the need for more empirical and theoretical evaluation of the effectiveness of such strategies. This research focuses mainly on problems related to the potential effects on sport consumers who experience brand music and the need for research designs that examine the touch points for their experience. Chelladurai and Chang (2000) define consumer touch points in sport contexts are those sites where interaction between sport brands (e.g., teams, companies, and events) and sport consumers take place. While there are numerous touch points where sport consumers encounter sport brands, there is a dearth of literature on the subject of brand-consumer interactions in sport retail stores.

Scholars claim that firms can spend upwards of millions of dollars each year enhancing the effects of lighting, music, and fixtures in retail environments "with the hope of creating an atmosphere that is conducive to retail success" (Gulas & Bloch, 1995, p. 95). In addition, numerous studies in consumer research have demonstrated the possibilities for music to influence consumers' emotional states and shopping outcomes (e.g., Areni & Kim, 2003; Kellaris & Kent, 1992; Mattila & Wirtz, 2001; Milliman 1982; 1986; North, Hargreaves, & McKendrick, 1999; Park & Young, 1986; Yalch &

Spangenberg, 2000). In particular, this study concerns the effects of brand music on consumers' perceptions and shopping outcomes in an online retail stores. Recently, the nature of the Internet has attracted considerable attention from scholars; however, there is a shortage of empirical research investigating the effects of music on consumers in an online retail store (Manganari, Siomkos, & Vrechopoulos, 2009). Furthermore, studies examining sport consumer behavior in the context of retail environments, be it traditional or online, are virtually non-existent.

In sum, the purpose of this study was to investigate the effects of team-related brand music on sport consumers' perceptions and shopping outcomes, including store evaluations, brand attitudes, and purchase intentions. In doing so, the theoretical perspectives of conceptual fluency and semantic relevance were explored to determine their relationship to such constructs as brand music, consumer behavior, and shopping outcomes. Specifically, this study examines how differences in song lyrics between team-related brand music and popular music affect consumer perceptions of musical fit. Because individuals may observe environmental characteristics differently, the characteristic trait of atmospheric responsiveness (Craik & McKechnie, 1977; McKechnie, 1974) was also investigated for a possible moderating influence on the study's findings. A model providing a visual depiction of these relationships is provided in the subsequent chapters of this dissertation.

Operational Definitions

Sonic Branding: Sonic branding is a process of brand management that involves the use of sonic elements (e.g., music, sound, and voice) within the framework of brand communication to create an authentic aural brand identity (Bronner & Hirt, 2009).

Brand Music: Brand music represents original and custom music that follows classic song pattern (i.e., verse and chorus) and features composition and lyrics designed exclusively for brand-related communications (Bronner & Hirt, 2009).

Sport Brand Music: Sport brand music is custom-designed music that embodies the attributes and characteristics of the sport brand, and plays a formative role in priming concepts related to the sport brand in the minds of sport consumers.

Musical Fit: Musical fit refers to the perceived congruence between a piece of music and a product, store, or brand, leading to an improved response in consumers' behavior (Zander, 2006). MacInnis and Park's (1991) musical fit scale was adopted in this study to measure perceptions of fit between music and a sport brand.

Atmospherics: Kotler (1973) defines atmospherics as any "designing of buying environments to produce specific emotional effects in the buyer that enhance purchase probability" (p. 50).

Online Atmospherics: Dailey (2004) defines online atmospherics as any "conscious designing of web environments to create positive effects in users in order to increase favorable consumer responses" (p. 796).

Atmospheric Responsiveness: Eroglu et al. (2001) define atmospheric responsiveness as "the tendency to base patronage and purchase decisions on the store's physical qualities" (p. 181).

Sport Consumer Behavior: Sport consumer behavior consists of consumer attitudes, perceptions, motives, and beliefs relative to the products and services offered in the sport and leisure industry (Funk, Mahony, & Havitz, 2003).

Overview of the Dissertation

This dissertation is organized into five chapters. This chapter introduces the research topic, presents the theoretical background guiding the research, and provides the rational for the study. Chapter II reviews the existing literature on music as it relates to the concepts and constructs involved in this study. Presented throughout the discussion in Chapter II is a series of testable hypotheses pertinent to this research, and an illustrative summary of study predictions concludes the chapter. Chapter III provides the methodology, outlining the details of the experimental design used to explore the research questions and test the hypotheses. Chapter IV focuses on the results of the analyses and provides some discussion concerning their interpretation. Chapter V, the last chapter, draws conclusions from the research, identifies potential limitations to the research, and provides implications for future studies.

CHAPTER II

LITERATURE REVIEW

This chapter provides a succinct review of extant literature on the effects of music from the marketing perspectives of branding and consumer behavior. Implicit in the discussion are hypotheses formulated with regard to the important concepts and constructs of this study. The first section introduces the concept of sonic branding, outlining the ways in which today's sport teams are employing such strategies. The second section deals with the phenomenon of musical fit, exploring its research history and drawing out consensus and gaps in the literature where the relationship between music and brands is concerned. The third section defines and discusses key concepts related to the effects of music on consumers' perceptions and shopping outcomes, including evaluations of the store, attitudes toward the brand, and purchase intentions. The fourth section examines the concept of retail atmospherics, detailing studies on the influence of ambient features in both traditional and online retail settings. Finally, a summary of the chapter is provided, including a visual depiction of the hypotheses and their interrelationships in the form of a model.

Sonic Branding

Current research suggests that the affinity people have for music is quite remarkable (Lusensky, 2010). In fact, Lusensky (2010) indicates that music is the form of media people would least like to live without, and it represents the peripheral aspect

of marketing people view most positively. With respect to music, Merriam (1964) states that there is "no other human cultural activity which is so all-pervasive and which reaches into, shapes, and often controls so much of human behavior" (p. 218). Hence, the probabilities for music to influence a wide array of consumer behaviors are quite high. In fact, scholars demonstrate the use of music to convey messages in abstract fashion (Scott, 1990), frame perceptions in advertising (Hung, 2001), and prime desired beliefs about the brand (Lavack, Thakur, & Bottausci, 2008). Not surprisingly, then, music is thought to be the most commonly studied variable in consumer research (Turley & Milliman, 2000), as well as a leading consideration and expense in the field of practice (Yalch & Spangenberg, 1993).

The ubiquitous nature of music offers potential for creating unique and lasting impressions in the minds and hearts of consumers (Zander, 2006). Much like a visual image, an audio fragment has the unique ability to elicit recall (Wallace, 1991; Hecker, 1984), induce emotions (Alpert & Alpert, 1990; Bruner, 1990; Gardner, 1985), and impact attitudes and behaviors (Beverland et al., 2006; Yalch & Spangenberg, 1990; Milliman, 1982, 1986). Because visual and audio components have the ability to affect consumers in similar ways, managers often employ them in tandem in the expression of brand identities across different marketing channels. Until recently, however, extant literature has almost exclusively relied on the visual domain (Kellaris, 2008). Stahl (1964) emphasized the need for visual uniformity of brand identities more than half a century ago. Stahl (1964) claimed that visual synergy across marketing channels could lead to enhanced brand equity. More recently, scholars and practitioners have begun to

consider the employment of uniform sound across marketing channels for the same purpose. Fulberg (2003) argues that the visual brand impressions are "under attack from all sides, and the need to find a new way of building a consistent approach to brand communications has become increasingly urgent" (p. 198). Thus, further empirical and theoretical exploration of sonic branding is needed to better understand its role in the communication of brand identities.

According to Lusensky (2010), music has the ability to establish uniform messages across various marketing channels, providing brand managers a vehicle for communicating that is remarkably flexible. This perhaps best explains why music has been used as a prominent feature in commercial advertising (Garfield, 1988) and retail stores (Turley & Milliman, 2000) in recent decades, and why music licensing fees have grown exponentially over the years (Alsop, 1985). In fact, research shows that companies spend anywhere from $10,000 for creative fees used to create original music, to millions of dollars for the rights to use popular songs produced and owned by music industry artists (Alsop, 1985). For example, Nike once reportedly spent $500,000 in licensing fees for the rights to use the song "Revolution" by The Beatles during the launch of an original marketing campaign (Cocks, 1987). However, more current accounts reflect movement in company spending away from music licensing and more toward the creative process of sonic branding (Fulberg, 2003; Jackson, 2003).

Sonic branding is "the creation of brand expressions in sound and the consistent, strategic usage of these properties across touch points" (Jackson, 2003, p. 9). It involves the process of forming an emotional connection between brands and consumers through

sound, defined in this context as "an associative anchor for recognition, communication of messages, image transfer, and image consolidation" (Spehr, 2009, p. 27). Kilian (2009) suggests that strong emotional connections triggered by sound can result in "preference and loyalty-inducing experiences with the brand" (p. 35). The most widely used forms of sonic branding include sound logos (e.g., Intel's 5-tone chime), jingles (e.g., State Farm's "Like a Good Neighbor" theme) and brand songs (e.g., UPS's "We [heart] Logistics" song). By employing the concept of sonic branding and combining it with a holistic view of marketing principles, some companies have learned to communicate brand messages in ways that fit seamlessly across touch points "where sound is a factor in the nature of the experience" (Jackson, 2003, p. 5).

Sonic branding is still a relatively new and evolving concept; thus, most brands have likely not yet realized its potential. Though research on sonic branding is virtually non-existent in the sport literature, there exists a steadily growing trend of sport brands making full use of the relationship between brand, music, and sport consumer. While for years popular music has been an important factor in the delivery of the sport product, managers now have less of a need for licensed mainstream music. Instead, the realization is steadily growing that managers can effectively incorporate brand music into overall marketing strategies (Bronner & Hirt, 2009; Jackson, 1993). For example, Gatorade, a brand of sport-related food and beverage products, has won big in recent years by adopting the concept of sonic branding and creating its own brand music. Prior to the launch of the new G Series, Gatorade developed a marketing campaign marking the evolution of the brand and celebrating its storied history. In doing so, managers

collaborated with music producer David Banner to create a song written and produced exclusively for the enhancement of the brand. This partnership resulted in a brand song titled "Gatorade Has Evolved," which became the featured track in Gatorade commercials advertising the G Series, as well as an instant anthem of sorts for the millions of Gatorade brand loyalists. In addition, the song was made available to the public free of charge on Gatorade's official website, a sensible effort on the part of the brand to engage consumers in ways never before realized.

Trends that are more recent appear to indicate a growing adoption of sonic branding by college and professional sport teams. Today, a steadily increasing number of sport teams are beginning to invest in the development of brand music to enhance brand identity and increase fan loyalty (Lemire, 2009). Einhorn (2000) notes that sport teams often spend upwards of millions of dollars for the rights to play popular music in stadiums, commercial advertising, radio and television broadcasts, and retail stores. However, it appears that some sport teams are now opting for the production of original and customized brand music. For example, the University of Florida (UF) recently partnered with branding agency Banshee Music to produce an entire music album titled *You're in Gator Country: The Official Music of the Florida Gators*. Seven songs were written and produced expressly for UF branding purposes by some of Gainesville's most acclaimed local artists, including Sister Hazel and Red Jumpsuit Apparatus. Song titles from the album included "I Come from the Swamp," "This is Gator Country," and "Gators on Top of the World."

According to Fulberg (2003), well designed and strategically executed brand music such as that described above can help generate desired beliefs about the brand. Moreover, Jackson (2003) notes that brand music may be particularly valuable when experienced at touch points that traditionally feature popular music. Further, Lusensky (2010) argues that transitions from popular music to brand music can be fundamentally important to sonic branding success, as the initial shock and awe of the transition is quite impactful on the immediate change in consumer perceptions.

Musical Fit

Studies dealing with the effects of music in consumer research have become increasingly prevalent over the years. Few studies, however, have explored the concept of "musical fit," the perceived congruence between music and a product, store, or brand, leading to improved response in consumers' behavior. Zander (2006) first observed musical fit in advertising research, where he observed the ability of music "to create differentiating effects on subjects' impressions of product endorsers and brands of an advertisement" (p. 465). Zander (2006) showed that, depending on style differences among music selections, music led to "significantly different impressions of the endorser as well as the brand without affecting general evaluations of the product" (p. 465). Yeoh and North (2010) investigated the impact of musical fit on the ability to recall products associated with either rebellious or affluent stereotypes. Participants were asked to recall 20 items they had seen while listening to either rock music or classical music. Results showed that more rebellious items than affluent items were recalled when rock

music was played, although the reverse was found when classical music was played. Yeoh and North (2010) claimed that musical fit operates by activating related knowledge structures concerning certain products, which then "ought to improve the ability to recall these products, and to do so at an earlier point in time, as compared to recall of unrelated products" (p. 368). While music fit has become a topic of interest in consumer research over the years, a dearth of literature on the topic still precludes. Nevertheless, the scant evidence to date supports the notion that musical fit can have positive and negative effects on product choice (Areni & Kim, 1993), responses to advertising (North, Hargreaves, MacKenzie, & Law, 2004), and shopping experiences (MacInnis & Park, 1991).

Areni and Kim (1993) explored how perceptions of musical fit between music and a retail shopping environment affected consumers' buying decisions. Findings revealed that classical music played in the background of a wine cellar led consumers to purchase significantly more expensive wine than did *Billboard* Top 40 music. The authors concluded that the attributes associated with classical music were more fitting of the attributes salient to expensive wine. Results of this study demonstrate the potential for music to highlight product attributes and store qualities to the extent that can effectively prime consumers' product selection. Similarly, North, Hargreaves, and McKendrick (1999) adopted a more context-specific approach, investigating the impact of playing either French or German music in the wine section of a store. Data revealed that the geographical origin of French and German music significantly influenced the propensity for consumers to purchase more French or German wines respectively.

Mattila and Wirtz (2001) explored how fit, or lack thereof, among different ambient features in a shopping environment influenced consumers' shopping behaviors. Specifically, researchers examined whether consumers perceived ambient features in a shopping environment (e.g., music and scent) relative to or independent of one another. Results showed that complementary ambient features in a shopping environment led to higher evaluations of the store and greater purchase intentions among consumers; yet, opposite effects were also observed when one ambient feature displayed qualities that conflicted with the nature of others. On this latter point, a field experiment conducted by Beverland et al. (2006) in a retail setting found that the notion of "misfit" between music and other atmospheric cues led to detrimental perceptions of store image and brand products in the minds of consumers. To this end, Beverland et al. (2006) suggest that misfit "triggers counterfactual thinking about the brand and the store, potentially leading to discomfort, exit, or non-entry" (p. 988).

Yeoh and North (2010) contend that applying more widely used scientific theories is necessary in order to gain a better perspective of musical fit and its potential to affect consumer perceptions and shopping behavior. Further, Yeoh and North (2010) postulate that the underlying principles of musical fit point to the psychological model of spreading activation (Collins & Loftus, 1975; Collins & Quillian, 1969; Greenwald, 1996). Spreading activation involves a network of interrelated semantic nodes primed by the activation of one semantic node and the consequential spread of activation to all other related nodes (Collins & Loftus, 1975). Previous studies have demonstrated the impact of spreading activation on decision-making processes (e.g., Martindale, 1981;

Martindale & Moore, 1988; Whitfield, 1983; Whitfield & Slatter, 1979). To this end, Grimes (2008) also notes the possibilities for semantic processing to affect the creation of meaningful brand communication in similar ways. To illustrate this point, Grimes (2008) offers the following:

> Brand memories, and thus brand meaning, can be activated at any point (node) in the engram. For example, a piece of music used in recent advertising, another brand in the product category or a visit to the place where the brand was consumed might all constitute links in the network. Once activated, these nodes fire electrical impulses that trigger the activation of every piece of information associated with the brand. In addition, each node will be part of a number of networks and thus becomes a pathway for associating a vast amount of additional information to the brand. (p. 76)

Yeoh and North (2010) also affirm that minds of consumers are "comprised of densely interconnected cognitive units, such that a specific piece of music can activate related knowledge structures" (p. 370). To this end, some researchers have demonstrated that an individual's preference or liking for a piece of music relates directly to the extent to which she perceives the music to be of natural fit to the environment (Martindale & Moore, 1988). In addition, researchers have also found that, since people regularly attach meanings to specific settings (e.g., cafeteria or yoga class), the evaluation of a music selection will oftentimes depend on whether the meanings attached to the music by an individual are consistent with the context in which the music is experienced (North & Hargreaves, 1996a; 1996b).

The aforementioned research discussed in this section is instrumental to the current understanding of musical fit. However, there currently exists a gap in the literature where research on music and its meaning is concerned. Hitherto, structural elements (e.g., volume, rhythm, and tempo) have been the central focus of most research studies on the effects of music. Conversely, studies on the role of music semantics (i.e., song lyrics) have been largely ignored in spite of judgments about how these elements are those to which most listeners grant the most attention (Scott, 1990). Meyer (1956) argues that conceptualizing music without regard for its semantic meanings provides an inaccurate portrayal of how people experience music in their everyday lives. Scholars find that music plays an important role in the total communicative task of presupposing information (Hecker, 1984) and communicating messages (Kotler, 1973), and therefore should not be remote from the meanings that accompany it (Meyer, 1973).

Previous research on musical fit has based assumptions on various factors other than meaning, such as music likability (MacInnis & Park, 1991), music genre (Areni & Kim, 1993; Kellaris, Cox, & Cox, 1993; North et al., 2004; Yeoh & North, 2010), and structural elements (Chebat, Chebat, & Vaillant, 2001; Kellaris & Kent, 1991; Zander, 2006). This study represents the first known attempt to spotlight the effects of song lyrics inherent to all non-instrumental music selections. Kellaris and Kent (1991) called for the examination of song lyrics nearly two decades ago as a means to extend the current knowledge on musical fit in retail settings. It was argued that the "aesthetic congruency of music with words may influence the reception and interpretation of verbal material" (Kellaris & Kent, 1991, p. 248). To date, however, the literature provides only

slight discussion of the potential for music lyrics to play a role larger than that of other factors previously explored. As such, the following hypothesis is put forth:

Hypothesis 1: Shoppers who experience brand music in an online store environment will have more favorable perceptions of musical fit than shoppers who experience popular music (H1).

Music Effects on Consumer Behavior

In the physical surroundings fashioned by retailers, researchers Yalch and Spangenberg (1990) note that "music is one of the most frequently used atmospheric factors to enhance the delivery of services to customers" (p. 32). Of the ambient variables influencing consumer evaluation of the store environment (e.g., temperature, crowding, music, lighting, and olfaction), studies investigating the stimulus of music are still at the forefront (Turley & Milliman, 2000). However, to supply an exhaustive review of the vast literature concerning the effects of music on listener responses would be an undertaking beyond the scope of this research. Instead, the aim here is to examine the applicable literature on the effects of music in reference to consumers' perceptions and shopping behaviors, including store evaluations, brand attitudes, and purchase intentions.

Prior research has recognized that people respond approvingly to music for which they have a particular penchant (Hays & Minichiello, 2005; North, Hargreaves, & O'Neill, 2000). It is this premise that largely guides much of consumer research devoted to the investigation of the effects of music on consumer perceptions and shopping

behaviors. Scholars in the field of consumer behavior first examined the effects of music through classical conditioning approaches (e.g., Gorn, 1982). According to Zander (2006), classical conditioning as it relates to this context involves "pairing a product (neutral stimulus) with a well liked piece of music (unconditioned stimulus) to produce an association between the two, and therefore a preference for the product (conditioned response)" (p. 466). In the most regularly cited research on music and its influence on consumer behavior, Gorn (1982) demonstrated persons' a conditioned reaction to product selection by pairing two different colored pens (neutral stimulus) with liked and disliked music (unconditioned stimulus). Data showed that majority of study participants chose to keep the pen that was paired with liked music over the pen that was paired with disliked music. Gorn (1982) explained the results by arguing that the items became associated with positive and negative feelings associated with either liked or disliked music through classical conditioning.

Some scholars have attempted to replicate the methods used in Gorn's (1982) experiment, but have failed to reproduce the same findings (see Allen & Madden, 1985; Kellaris & Cox, 1989; Pitt & Abratt, 1988). Allen and Madden (1985) suggested that Gorn's (1982) findings might have been due to other elements of music, such as music tempo, volume, genre, or modality. Kellaris and Cox (1989) questioned whether possible demand effects present during data collection influenced Gorn's (1982) conclusions. Kellaris and Cox (1989) argued that Gorn's (1982) findings could not have been the result of sheer music appeal alone. Meta-analytic studies soon followed (Bruner, 1990; Garlin & Owen, 2006; Turley & Milliman, 2000), providing

comprehensive overviews of the existing body of empirical research examining the effects of music on emotions, attitudes, and behaviors, as well specific shopping-related outcomes, such as store evaluations, brand attitudes, and purchased intentions.

Store Evaluations

Previous researchers suggest that consumers make judgments and evaluations based on a factor known as "associative learning," or the mechanism by which thoughts and feelings towards a target are generated (Shimp, Stuart, & Engle, 1991). Scholars have also noted the importance of understanding the nature of consumer evaluations, as they represent important indicators of brand success (Aaker & Keller, 1990; Boush & Loken, 1991), and they are significant contributors to consumers' satisfaction with a shopping experience and evaluations of the store (Grewal, Baker, Levy, & Voss, 2003).

Research shows that consumers' store evaluations are more favorable when shoppers perceive music played in a shopping environment as being compatible with other observable in-store atmospherics (Grewal et al., 2003; Mattilla & Wirtz, 2001; Yalch & Spangenberg, 1993). According to Chebat et al. (1998), music can serve as an effective stimulus for enhancing cognitive activity and priming desired beliefs, which, in turn, may significantly influence consumers' evaluations of a store and shopping experience. Dube and Morin (2001) suggest that music played in the shopping environment is oftentimes the chief influence of consumers' evaluation of a store and satisfaction with a shopping experience. More specifically, Dube and Morin (2001) found that well liked music perceived by consumers in a shopping environment led to more favorable evaluations of the store than did music that was disliked by consumers.

Further, a study by Mattila and Wirtz (2001) showed that music was a determining factor in how consumers evaluated the overall store environment. Mattila and Wirtz (2001) also found that store evaluations were significantly influential in explaining consumers' choice behaviors and impulse purchases.

Because online retail stores do not feature the same physical qualities of a traditional brick-and-mortar store (e.g., tangible products or services), online shoppers' attitudes and behaviors are more susceptible to store evaluations (Eroglu et al., 2001). In addition, as evidenced in the aforementioned research, music in a shopping environment can play an instrumental role in the formation of consumers' evaluations of the store. Furthermore, because scholars have demonstrated the propensity for consumer evaluations to influence various brand-related outcomes (Aaker & Keller, 1990), store evaluations are predicted to impact attitudes toward the brand. Consequently, I propose the following hypotheses:

Hypothesis 2: Shoppers' favorable perceptions of musical fit will positively influence their evaluations of the store (H2).

Hypothesis 3: Shoppers' positive evaluations of the store will positively influence their attitudes toward the brand (H3).

Brand Attitudes

A brand is defined as a "name, term, sign, symbol, or design, or combination of them intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition" (Keller, 1993, p. 2). According to Meenaghan (1995), a brand is imbued with symbolic values and meanings that articulate

to consumers the attributes, quality, and performance of products and services. When exposed to a brand, consumers often develop personal beliefs and feelings about it that are stored in memory as "brand knowledge" (Keller, 2003). This internal knowledge is accumulated through direct and shared experiences with the brand over short or long periods. As a result, consumers often develop, alter, or maintain an overall evaluation of the brand based on these experiences (Wilkie, 1986). This evaluation—whether positive or negative—is a function of consumers' attitudes toward the brand, also commonly referred to as brand attitude (Mitchell & Olson, 1981).

Much of the extant marketing literature on brand attitude stems from theoretical principles developed by Fishbein (1963, 1967; Fishbein & Ajzen, 1975) on attitudes, intentions, and behaviors. Fishbein and Ajzen (1975) contend that a person's attitude is oftentimes "a function of his salient beliefs at a given point in time" (p. 222). Therefore, attitudes toward a concept can only be changed through the modification of salient beliefs about the same concept (Fishbein & Ajzen, 1975). In marketing terms, altering consumers' salient beliefs about a product or service can change their attitudes toward a brand in the same way. Mitchell and Olson (1981) suggest that the causal determinants of attitude are critically important to understand due to the mediating effects they have on marketing decision variables. Furthermore, Mitchell and Olson (1981) argue that a more comprehensive understanding "of the causal dynamics of attitude formation would not only aid marketing researchers in measuring the attitudinal impact of marketing variables, but also help managers develop more effective marketing strategy" (p. 318).

Lane and Jacobson's (1995) research suggests that brand attitudes can have

positive influences and adverse consequences on satisfaction, intentions, and behaviors. Similarly, Taylor and Hunter (2003) found that consumers who displayed positive attitudes toward a brand demonstrated significantly greater brand loyalty and revisit intentions. Prior studies indicate that brand attitudes are commonly employed as useful indicators of purchase behaviors. To this end, research by Madrigal (2001) and Spears and Singh (2004) revealed that differences in brand attitudes led to significant effects on actual purchases and purchase intentions among study participants.

In relation to music, Rossiter and Percy (1991) found that purchase intentions influenced by changes in song selections were mediated by consumers' attitudes toward the brand. Specifically, the findings indicate that consumers were less likely to purchase a product when the brand was perceived as being linked with disliked music (negative brand attitude), and more likely to purchase a product when the brand was matched with liked music (positive brand attitude). Beverland et al. (2006) examined the influence of music on brand attitude formation by examining the different uses of background music in advertisements. Researchers found that music positioned to fit an advertisement significantly affected participants' attitudes toward the brand. The findings also showed that music demonstrating a good overall fit with the advertisement was particularly effective among consumers without prior knowledge of the brand. On this point, the authors concluded that consumers with less knowledge of a brand observed an advertisement's background music as an important indicator of the brand's overall personality and identity.

Lee and Labroo (2004) argue that conceptual fluency can lead to individuals having more favorable attitudes toward the brand. In addition, Hamann (1990) suggests that conceptually driven processes may be sensitive to semantic manipulations. That is, conceptual fluency may benefit from a meaningful and expected context (Lee & Labroo, 2004). Consistent with these assumptions, I propose that brand music will influence shoppers' attitudes toward the brand more so than popular music. As such, I provide the following hypotheses:

Hypotheses 4: Shoppers' favorable perceptions of musical fit will positively influence their attitudes toward the brand (H4).

Hypothesis 5: Shoppers positive attitudes toward the brand will positively affect their purchase intentions (H5).

Purchase Intentions

Spears and Singh (2004) define purchase intentions as "an individual's conscious plan to make an effort to purchase a brand," or a "favorable intent" to buy products and services from brands (p. 54). According to Fishbein and Ajzen (1975), consumers must intend to purchase a product before the actual purchase of the product takes place. Thus, the purchase intentions of consumers are considered a significant link between consumer attitudes and consumer behavior (Fishbein & Ajzen, 1975).

Scholars suggest that emotions induced by the environment may have direct effects on behavioral outcomes (Mehrabian & Russell, 1974). Similarly, emotions induced by music in the retail setting can have a significant impact on an individual's purchase intentions (Donovan & Rossiter, 1982; Donovan, Rossiter, Marcoolyn, &

Nesdale, 1994). According to Schmitt (1999), music played in a retail store serves a larger role than most other store elements in enhancing sales opportunities. Previous researchers in consumer research have demonstrated the potential for music to significantly influence consumers' decisions at the point of purchase (Alpert & Alpert, 1990; Areni & Kim, 1993; Kellaris & Kent, 1992). For example, Milliman (1986) found that variations in tempo and rhythm of background music significantly affected people's purchase intentions related to alcohol consumption in a restaurant. These researchers concluded that slower music led people to patron the restaurant for a lengthier period, thereby enabling them to make additional purchases.

In addition, Kellaris and Kent (1992) found that music tempo positively or negatively influenced actual purchases by slowing down or speeding up the pace at which shoppers travel throughout the store respectively. Similarly, research by Yalch and Spangenberg (1993) indicated that people tend to spend more money or make additional purchases when they shop for longer periods. Interestingly, these authors also found that consumers perceived to spend less time shopping when familiar music was played in the background of a retail store (Yalch & Spangenberg, 2000). However, consumers in the latter study perceived that they had shopped for longer periods when unfamiliar music was played in the store.

The research assumptions described above demonstrate the influence that different styles of music can have on consumers' purchase intentions. Given that participants' purchase intentions represent a critical outcome variable or construct in the current study, I propose the following hypothesis:

Hypothesis 6: Shoppers' favorable perceptions of musical fit will positively influence their purchase intentions (H6).

Atmospherics

Kotler (1973) defined store atmospherics as "the designing of buying environments to produce specific emotional effects in the buyer that enhance purchase probability" (p. 50). In this regard, buying environments consist of various atmospheric features (e.g., lighting, music, and decor) used to capture the attention of consumers and influence their moods and behaviors while shopping (Kumar & Karande, 2000, Lam, 2001). According to Kotler (1973), the atmospherics of a retail store can be manipulated to produce certain emotional and behavioral responses in consumers, thus impacting their shopping experience and purchase decisions. For example, the fashion specialty store Nordstrom is perceived by many to have an image of luxury, a high level of customer service, and a high quality of merchandise (Grewal, Krishnan, Baker, & Borin, 1998). These perceptions exist in large part because the store features an immaculately clean design, spacious dressing areas, and trademark live piano on the ground floor. However, though retailers attempt to create shopping environments that positively enhance consumers' experiences, the lack of cohesion among atmospheric features can sometimes send conflicting signals that result in negative outcomes. These dynamics point to the primacy of focusing on atmospherics to ensure that these environmental features serve a role complementary to that retailing principles and overall marketing strategies (Kotler, 1973; Lam, 2001).

S-O-R Framework

The theoretical paradigm that is most widely used in research involving store atmospherics comes from environmental psychology (Garlin & Owen, 2006). More specifically, much of the extant literature on store atmospherics involves consumer research adapted from work done by environmental psychologists Mehrabian and Russell (1974). Mehrabian and Russell's (1974) theoretical model (the Mehrabian-Russell model) posits that mood states mediate the relationship between the physical environment and human behavior. That is, under physical conditions inherent to the environment, an emotional response is first elicited, which in turn leads to a behavioral response.

The Mehrabian-Russell model (see Figure A-1) was developed under the conventional Stimulus-Organism-Response (S-O-R) framework, which proposes that an active organism intervenes between stimulus and response. The model asserts that a nonspecific measure of stimulation (S) in the environment, known as the "load" of an environment, directly impacts the degree of emotions induced by the environment on the organism (O) and, as a result, causes behavioral responses (R). Using information theory, Mehrabian (1976) suggests that the load of an environment can be described using a concept known as "information rate," which is referred to as the amount of information present in the environment per unit of time. According to Mehrabian (1976), the more information (i.e., stimuli) an individual has to process, the higher the load of her environment. He also concludes that the load of the environment is contingent upon its novelty and complexity. In this regard, novelty refers to the sense of

unfamiliarity and uncertainty on observer feels toward the environment, whereas complexity has to do with the number of stimuli in the environment and the rate in which there is change among them.

According to Mehrabian and Russell (1974), all human emotions can be classified into three basic dimensions of emotional states that serve as intervening variables in the S-O-R framework. These basic dimensions include pleasure (the degree to which an individual feels content or discontent in her environment), arousal (the level of excitement, stimulation, or alertness an individual feels in her environment), and dominance (the degree to which an individual feels unrestricted and poised in her environment). According to Mehrabian and Russell (1974), each of the dimensions is independent from the other two (no dimension causes the other), and together the three dimensions form what is commonly referred to as the PAD (pleasure, arousal, and dominance) framework.

Since its inception, numerous scholars have employed the PAD framework across various fields to analyze the effects of environment stimuli on human behavior. Mehrabian and Russell (1974) add that the nature of an individual's response to the PAD dimensions can be categorized as either approach or avoidance behaviors. Approach and avoidance behaviors consist of four basic dimensions: (a) a desire to stay in (approach) or leave (avoid) the environment; (b) a desire to explore (approach) or remain fixed in (avoid) the environment; (c) a desire to communicate with (approach) or take no notice of (avoid) others in the environment; and (d) the enhancement (approach) or hindrance (avoidance) of performance and satisfaction with task performances.

Retail Atmospherics

Donovan and Rossiter (1982) adapted the Mehrabian-Russell model to account for approach-avoidance behaviors readily observed in the retail environment. Donovan and Rossiter (1982) asserted that in-store atmospherics inherent to the retail setting influence the emotional states of consumers. Further, the authors contend that altered emotional states of consumers often lead to predictable changes in approach-avoidance behaviors within the store. Hence, today's retailers have redefined themselves as a source of memories, rather than goods, and as an "exchange stager" rather a service provider (Pine & Gilmore, 1999, p. 12). In addition, Mathwick, Malhotra, and Rigdon (2001, p. 40) comment that proactive brick-and-mortar retailers are "being transformed into 'retail interactive theater,' staffed to offer advice, cooking lessons, beauty makeovers and fashion shows." Such an interactive and stimulating environment can incessantly affect consumers' emotional and cognitive states.

Though the cognitive influences of price, selection, and quality have largely accounted for much of the research done on store selection and planned purchases, Donovan and Rossiter (1982) suggest, "the emotional responses induced by the environment within the store are primary determinants of the extent to which the individual spends beyond his or her original expectations" (p. 54). More specifically, the atmospherics of a store play the role of environmental stimuli in the traditional S-O-R framework, whereas shoppers' emotional reactions and approach-avoidance behaviors are deemed organism and response behaviors, respectively.

Donovan and Rossiter (1982) found that, with regard to Mehrabian and Russell's (1974) PAD dimensions, only pleasure and arousal could be considered accurate predictors of shopping behaviors in the retail context. The emotional state of dominance was not found to have significant effects on consumers' behaviors. The adaptation of the Mehrabian-Russell model to the context of retailing was instrumental in determining the effects of store atmospherics on consumers' shopping behaviors. Moreover, it has led to an abundance of subsequent empirical work in the field focused on a wide array of atmospheric cues in retail and service settings.

In recent years, there has been a growing interest in the effects of in-store atmospherics on a wide variety of consumer behaviors and shopping outcomes (Bruner, 1990; Garlin & Owen, 2006; Turley & Milliman, 2000). Research on the topic has shown that managers can manipulate in-store atmospherics, such as crowding (Eroglu & Harrell, 1986; Eroglu & Machleit, 1990), lighting (Areni & Kim, 1994; Summers & Hebert, 2001), color (Bellizzi, Crowley, & Hasty, 1983), music (Bitner, 1992; Hui, Dube, & Chebut, 1997; Kellaris & Kent, 1992; Milliman, 1982; 1986; Yalch & Spangenberg, 1990; 2000), and scent (Bone & Ellen, 1999; Gulas & Bloch, 1995; Spangenberg, Crowley, & Henderson, 1996), to directly impact emotional states and behavioral outcomes. More specifically, researchers have tested the effects of atmospherics on store evaluations (Mattila & Wirtz, 2001; Schlosser, 1998), satisfaction with the shopping experience (Bellizzi et al., 1983; Eroglu & Machleit, 1990), attitudes toward the brand (Park & Young, 1986), perceived and real shopping times (Kellaris & Kent, 1992; Milliman 1982; 1986; North & Hargreaves, 1999; Yalch & Spangenberg,

2000), purchase intentions (Alpert, Alpert, & Maltz, 2005; Areni & Kim, 2003; Milliman, 1982; 1986; Morris & Boone, 1998), and intentions to revisit the store (Spangenberg et al., 1996). While there are numerous atmospheric stimuli present in store environments, not to mention countless possible responses that are observed with respect to all of them, this research concerns only the stimulus of music and its effects on store evaluations and brand attitudes.

Online Atmospherics

Online buyer-seller relationships exist in what Rayport and Sviokla (1994) termed the "marketspace," which they define as "a virtual realm where products and services exist as digital information and can be delivered through information-based channels" (p. 14). Though it remains a relatively small fraction of total retail sales, the growth of online retail sales has steadily outpaced that of retailing in the traditional sense (US Census Bureau, 2010). Since the inception of the online retail store in the late 1990's, shopping has also become the fastest growing use of the Internet (Forsythe & Shi, 2003). As such, online retailing has attracted considerable interest from academics over the years, since "the transition from brick-and-mortar retailing to click-and-mortar environments raises considerations about the dynamics of this new business approach" (Manganari et al., 2009, p. 1143).

Previous researchers focusing on online retailing have identified several factors that have contributed to the extensive growth of online shopping in recent years. To this end, Monsuwé, Dellaert, and Ruyter's (2004) provided a comprehensive overview of the literature related to consumers' attitudes toward the Internet and their intentions to shop

online. The authors found that "usefulness" and "ease of use" were the two utilitarian aspects of the Internet that motivated consumers to engage in online shopping. In addition, the hedonic aspect of "enjoyment" was found to be an equally motivating factor in their decisions to shop online. Monsuwé et al. (2004) defines usefulness as "consumers' perceptions that using the Internet as a shopping medium enhances the outcome of their shopping experience" (p. 107). Ease of use, on the other hand, involves the perception that the process leading up to the shopping outcome will involve a minimum of effort (Monsuwé et al., 2004). Whereas usefulness and ease of use are concerned with consumers' perceptions of shopping outcomes and experiences, enjoyment "results from the fun and playfulness of the online shopping experience, rather than from shopping task completion" (Monsuwé et al., 2004, p. 107).

Though the functional qualities mentioned above are important facets of online shopping and significant predictors of shopping behaviors, Childers, Carr, Peck & Carson (2001) argue that additional studies are still needed to assess how the hedonic aspects afforded by the Internet influence consumers' attitudes and perceptions. Alba et al. (1997) recognized that the retailer-customer relationship in e-commerce is different from that in traditional retail business, as online stores do not have the luxury of face-to-face interaction between retailers and customers. Similarly, Menon and Kahn (2002) argue that emotional responses commonly researched in traditional brick-and-mortar stores can also affect consumers' reactions in dynamic environments such as the Internet. The authors contend that unique experiences (e.g., flash intros, background music, web design), encountered early on in an Internet shopping trip "can impact the emotions of

shoppers and thereby influence the time spent, the nature of browsing, and promotional interactions during the rest of the trip" (Menon & Kahn, 2002, p. 32). However, despite a steadily growing body of consumer research on atmospherics in traditional stores, the impact of these sensory stimuli in the online retail setting has yet to be thoroughly examined (Eroglu et al., 2001; Hoffman & Novak, 1997). For instance, Manganari, et al. (2009) provided a conceptual framework for the effects of online store atmosphere on consumer behavior from the findings of empirical studies dating back to when literature on online atmospherics first emerged. The authors concluded that "despite the numerous studies conducted on the effects of music and scent in the conventional store, there are no published empirical studies that investigate their impact on consumers' responses online" (Manganari et al., 2009, p. 1143).

Atmospheric Responsiveness

The personality trait of atmospheric responsiveness was first developed in the field of environmental psychology by McKechnie (1974), who argued that the tendency for qualities of the immediate physical environment would be to influence individuals' attitudes and dispositions. The basic premise was that individuals who possess the trait will exhibit a heightened sensitivity to their immediate physical surroundings, and will therefore respond more affectively to changes in environmental stimuli than those who lack the trait (Craik & McKechnie, 1977; McKechnie, 1974). This knowledge was later adapted by Grossbart, Hampton, Rammohan, and Lapidus (1990), and applied to the context of retail, whereby the authors more appropriately defined atmospheric responsiveness as "the extent to which physical design and condition influence a

customer's decisions on where to shop and how much time to spend shopping" (p. 226). The thinking is that the more conscious customers are of the environmental features of a shopping environment, the more likely they are to experience the affective states of which the store atmosphere is designed to produce (Eroglu et al., 2003).

Eroglu et al. (2001) adopted the construct of atmospheric responsiveness to present a model of how online store atmospherics influence shoppers' responses. The model depicts that emotional states caused by store atmospherics will mediate the relationship between site atmosphere and shopper attitudes, satisfaction, and various approach/avoidance behaviors. In addition, the model proposes that involvement and atmospheric responsiveness act as moderating influences. Empirical tests of the model found that atmospheric responsiveness significantly affects the relationship between online store atmospherics and consumers' emotional states, which significantly impacted their satisfaction with the shopping experience and their attitudes toward the store (Eroglu et al., 2003).

Given the importance of the atmospheric responsiveness trait in understanding shoppers' perceptions of store atmosphere, it is important that this research account for this variable before attributing any effects to the music variable. As such, I propose the following hypotheses:

Hypothesis 7: The personality trait of atmospheric responsiveness will moderate the relationship between music played in an online store and shoppers' perceptions of musical fit (H7).

Summary

In this chapter, I have provided a review of the existing branding and consumer behavior studies on music that has been undertaken in the marketing literature. I have also extended the discussion on the imperative concepts and constructs put forth in the first chapter of this dissertation. In doing so, I more fully expounded on the novel concept of sonic branding, and put forth some examples of its presence in the sport and entertainment industry. In addition, I summarized the literature regarding musical fit, and I made clear the reasons why theories of semantic processing and spreading activation might influence the work in this dissertation. Further, I provided a concise summary of the effects of music on shopping outcomes, including consumers' store evaluations, brand attitudes, and purchase intentions. Finally, I gave a succinct report of research involving atmospherics and its observed effects in traditional and online retail settings. In doing so, I also presented background information regarding the personality trait of atmospheric responsiveness, highlighting its importance to this research.

This chapter provides a series of the testable hypotheses, which is summarized as follows: (a) shoppers who experience brand music in an online store environment will have greater evaluations of musical fit than shoppers who experience popular music (H1); (b) shoppers' perceptions of musical fit will influence their evaluations of the store (H2), which then affects their attitudes toward the brand (H3); (c) shoppers' perceptions of musical fit will influence their attitudes toward the brand (H4), which then affects their purchase intentions (H5); (d) shoppers perceptions of musical fit will influence their purchase intentions (H6); and (e) the personality trait of atmospheric

responsiveness will moderate the relationship between music played in an online store environment and shoppers' perceptions of musical fit (H7). An illustrative summary of these predictions is presented in Figure A-2.

CHAPTER III

METHODOLOGY

In the previous chapter, I proposed a series of testable hypotheses based on theoretical insights and empirical evidence. In this chapter, I present the methodological issues pertinent to the research design and procedures used to test the hypotheses. First, I provide the research strategy, which describes the process through which I selected the research design. Second, I discuss the details regarding the research design, including the reasons for selecting the music employed in this study. Third, I delineate the dependent variables and their measures. Lastly, I conclude by providing information concerning the sample selection, study setting, and experimental procedure.

Research Strategy

In addressing the most appropriate way of testing research questions and hypotheses, three fundamental types of research designs are generally considered—quantitative, qualitative, and mixed methods (Creswell, 1994). According to Creswell (1994), quantitative and qualitative designs should not be viewed as polar opposites, as they so often are, but rather as different ends of a continuum. In other words, "a study *tends* to be more quantitative than qualitative or vice versa" (Creswell, 1994, p. 3, italics added for emphasis). The designs of quantitative and qualitative research are frequently distinguished simply by framing their methods in terms of words rather than numbers respectively (Denzin, 2009). However, a more holistic way of understanding the

differences between them "is in the basic philosophical assumptions researchers bring to the study, the types of research strategies used overall in the research, and the specific methods employed in conducting theses strategies" (Creswell, 1994, p. 3).

According to Denzin and Lincoln (2000), "qualitative research involves an interpretive, naturalistic approach to the world" (p. 3). Qualitative designs generally employ the use of case studies, interviews, artifacts, introspection, observation, or cultural texts to study phenomena in their natural setting. Hence, qualitative data is collected in the form of interviews, field notes, photographs, recordings, or memos to oneself (Denzin & Lincoln, 2000). In contrast, quantitative research is concerned with measuring constructs, testing hypotheses, and generalizing findings (Kerlinger & Lee, 2000). Because behaviors are best understood in terms of relationships between variables, most studies in the field of consumer research have been historically conducted using quantitative designs (Jacoby, 1978). Moreover, these designs have been customarily experimental in nature. In experimental research, the researcher has direct control over the variables of interest in the design (Kerlinger & Lee, 2000). In contrast, non-experimental research limits the control over variables because "their manifestations have already occurred or because they are inherently inmanipulable" (Kerlinger & Lee, 2000, p. 558).

In order to achieve the research objectives of this study, I selected to employ an experimental design. More specifically, because I randomly assigned study participants to different condition groups, I utilized a true experimental design (e.g., laboratory experiment) as opposed to a pre-experimental or quasi-experimental design (Kerlinger &

Lee, 2000). Of the eight categories of research strategies delineated by McGrath, Martin, and Kilka (1982), laboratory experiments provide the most control over the variables and greatest precision in their measurement. Further, Sawyer, Worthing, and Sendak (1979) indicate that laboratory experiments related to marketing strategies "can be an efficient and managerially useful information source" (p. 60). However, Greenwood (1982) identifies three validity issues concerning the use of experimentation in behavioral research. First, he indicated that experiments are artificial and isolated, and therefore do not generalize to the real world environment. Second, he contends that demand effects may contaminate the findings of experimental research. That is, an individual may change her behavior in a laboratory experiment in ways she feels is socially acceptable or appeasing to the researcher. Lastly, because social psychological phenomena are inherently relational, alteration becomes a problematic issue with experimentation. Greenwood (1982) argues that variables brought into the laboratory environment essentially change in nature, thereby altering the context in which they are observed.

To address these issues, I attempted the following tasks. First, because this research employs a web-based design, the online retail store used in this study did not sacrifice any of the rich features important to this investigation and regularly observed in the real world environment. To this end, any extraneous cues that were incidentally lost during the experiment only made for lesser demands on the available perceptual resources on the part of the participants. Hence, participants were able to focus their attention more intently on the main stimulus of interest (i.e., music), which naturally

resulted in a stronger test of the hypotheses. Second, I attempted to ensure trustworthiness and confidentiality in this study by having participants undergo an informed consent process. During the consent process, I made participants aware of their right to refuse participation without consequence, and expressed to them that any opinions provided would be kept confidential throughout the entire research process. In addition, I seated participants in private cubicles during the experiment; thus, contamination of the laboratory environment due to social influence from neighboring participants likely did not occur. Finally, because the underlying structure of music does not change regardless of situation or context (Cross, 2001), I did not alter this variable in any way during experimentation. Moreover, the online retail store in which the variables were manipulated did not undergo any visual alteration—the only change in the shopping environment was that to the auditory feature of background music. In sum, the aforementioned validity checks should indicate the extent to which the research design was sufficient to permit empirical testing.

Research Design

Structural equation modeling (SEM) by means of AMOS 7.0 (Arbuckle, 2006) was used to test the hypotheses. Moderation analysis was conducted following the recommendations of Marsh, Wen, and Hau (2004). I used a standardized measure of atmospheric responsiveness to create the music condition × atmospheric responsiveness product term (Marsh et al., 2004). Previous researchers have noted difficulties detecting interactions through moderated regression because of a significant loss in statistical

power (Cohen, Cohen, West, & Aiken, 2003; McClelland & Judd, 1993). As such, researchers and statisticians generally accept significant alpha levels of .10 for such analyses (Aguinis, 1995; Harrison, Price, & Bell, 1998). To assess model fit, the following fit indices were interpreted: comparative fit index (CFI), root mean square error of approximation (RMSEA), and Tucker Lewis Index (TLI). In doing so, CFI values greater than .95, RMSEA values less than .08, and TLI values greater than .90 were considered to be indicative of adequate model fit (Browne & Cudeck, 1993; Hu & Bentler, 1999; Marsh et al., 2004).

Music Selection

To satisfy the sport brand music condition (high fit condition), five songs were selected from the music album titled *Get Rowdy: The Official Music of the Dallas Cowboys*. The songs on this album were written and recorded by Texas music artists, such as Cowboy Troy and Los Lonely Boys, and featured song titles like "Cowboy Stomp," "Get Rowdy Cowboys," and "Swing it Around Cowboy Town." A content analysis was performed on these songs to ascertain whether their lyrics consisted of semantic features related to the Dallas Cowboys. As anticipated, data revealed that these songs consisted of countless semantic features highly associated with the Dallas Cowboys. Some examples of semantic features that were dominant and distinct to songs in the sport brand music condition include "let's go Cowboys," "this is Cowboy town," and "this is America's team." It was predicted that participants would perceive the songs

in this condition as having a high degree of musical fit with the Dallas Cowboys (Hypothesis 1).

To satisfy the popular music condition (low fit condition), the top five songs from the *Billboard* Hot 100 music chart were selected. These singles included "E.T." by Katy Perry, "Born This Way" by Lady Gaga, "Just Can't Get Enough" by Black Eyed Peas, "Forget You" by Cee Lo Green, and "Rolling in the Deep" by Adele. Retailers normally play music from *Billboard* music charts in their stores because they reflect current "snapshots" of what the vast majority of consumers are listening to at the time (Carah, 2010). In addition, most studies on music in consumer research have used songs featured on *Billboard* music charts as a way to neutralize the influence of music likability on study results (Kellaris, 2008). Nevertheless, this potential confound was accounted for using Macinnis and Park's (1991) recommendations to examine perceptions of music likability for both conditions. A second content analysis was performed on these songs to ensure that their lyrics did not consist of any semantic features relevant to the Dallas Cowboys. As expected, findings revealed that song lyrics in this condition had no semantic relations to the team. It was predicted that participants would observe these songs as having a low degree of musical fit with the Dallas Cowboys brand (Hypothesis 1). Table B-1 provides a detailed summary of music selections for both conditions.

Previous researchers have demonstrated the effective use of song excerpts in consumer studies involving the influence of music (Areni & Kim, 2004). Thus, 45-second excerpts consisting of the most dominant and distinct semantic features relative

to each song were extracted. Song excerpts were used so that the songs could be easily randomized in each experimental condition without participants' shopping times becoming a confounding issue. In this way, order effects that may otherwise have been problematic during experimentation were lessened.

Participants

Participants were comprised of college students from marketing courses at a large university in the southwestern region of the United States. In order to avoid validity errors associated with moderation analyses due to sample sizes too small (Hair, Anderson, Tatham, & Black, 1998) or too large (Kerlinger & Lee, 2000), I deemed it necessary to acquire a sample size of at least 200 participants to achieve statistical significance in this study. Student participants were given course credit for their participation in the study. An optional assignment was planned for those students who chose not to participate in the study. Participants were informed that their involvement in the study was entirely voluntary, and that they could withdraw at any time without their relations with the university being affected. A signed copy of an informed consent was obtained from participants prior to their participation in the study.

While the use of college students as participants in laboratory experiments has been the topic of some debate (see Lynch, 1982, 1999), countless experimental studies in the field of consumer research have employed the use of college students (Enis, Cox, & Stafford, 1972). Moreover, Calder, Phillips, and Tybout (1981) argue that college students can be particularly useful in consumer research focused on shopping behaviors.

With regard to online shopping, previous research indicates that college students express attitudes and behaviors comparable to that of non-students, and can therefore be used as reasonable surrogates for consumers in online retail studies (Tih, Ennis, & Poon, 2008). In addition, the student population should be of great interest to sport marketers, as they represent a vital and sizable segment of sport consumers (Mason, 1999).

Measures

The variables examined in this research include the following: musical fit, evaluations of the store, attitudes toward the brand, purchase intentions, and atmospheric responsiveness. These variables were ascertained using measures developed by previous researchers in the field of consumer research. Final scores were calculated for each measure based on the mean of the items. In addition, reliability estimates (Cronbach's alpha) were assessed and are provided below for each measure. Table B-2 provides a detailed summary of all measures and the scale items used for each of them.

Musical Fit

To measure musical fit, a five-item scale developed by MacInnis and Park's (1991) was utilized. Participants were asked to respond to the following phrases: "I think the music is suitable for this online store," "I think the music is suitable for my shopping experience," "I think the music fits well with the products sold in this online store," "I think the music goes together well other online store features," "I think the music fits well with the image I have of the Dallas Cowboys." Items were measured on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The

reliability estimate for the measure was high (α = .94).

Evaluation of the Store

Spangenberg, Grohmann, and Sprott's (2005) three-item scale was utilized to measure evaluation of the store. Participants responded to the following phrases: "How favorable is your opinion of the online store," "How pleasant was your experience while shopping in the online store," and "How would you describe your overall evaluation of the online store?" All phrases were anchored with 7-point semantic differential scales using the following endpoints: "bad–good," "pleasant–unpleasant," and "unfavorable–favorable." There was high reliability estimate for the measure (α = .89).

Attitude towards the Brand

MacKenzie and Lutz's (1989) four-item scale was used to measure attitude towards the brand. Participants were asked to respond to these phrases: "How favorable is your attitude toward the Dallas Cowboys," "How would you describe your attitude toward the Dallas Cowboys," "How much do you like the Dallas Cowboys," and "How would you describe your overall attitude toward the Dallas Cowboys?" Items consisted of 7-point semantic differential scales with the endpoints: "unfavorable–favorable," "negative–positive," "dislike–like," and "bad–good." The reliability estimate for this measure was high (α = .96).

Purchase Intentions

Purchase intentions were measured using an adapted version of Notani's (1997) three-item scale: "I would patronize this online store," "I would purchase products or services from this online store," and "I plan to purchased from this online store in the

near future." Items were measured on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), and the reliability estimate for the measure was high ($\alpha = .96$).

Atmospheric Responsiveness

Atmospheric responsiveness was measured using a four-item scale developed by Eroglu et al. (2003): "I pay close attention to my physical surroundings when I go shopping," "Store elements like music, colors, and lighting make a difference to me in evaluating my shopping experience," "I find myself making shopping decisions based on how the store looks," and "Store décor influences my decisions about where I shop." Items were measured on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). There was high reliability estimate for the measure ($\alpha = .86$).

Procedure

The experiment was performed in a computer research laboratory at a large university in the southwestern region of the United States. As participants entered the room, a research assistant greeted each of them and randomly assigned them to a private cubicle equipped with a computer and a headset. Once seated, participants had no visual access to other participants, thus reassuring participants of the confidentiality of their responses. It was explained to participants that their involvement in the study would directly benefit faculty members in the department of retail studies at the university. In doing so, the researcher was disassociated from view that he was a chief benefactor of the findings, therefore decreasing the likelihood for demand effects. Participants were

instructed on how to proceed with the experiment and how to complete to the web-based questionnaire using Qualtrics online survey software. Before participants gained access to the Internet, they were required to read and sign the informed consent detailing the ethical issues related to the study and how their participation was entirely voluntary.

Computers were preset to the survey instrument on the Qualtrics website. The first section of the instrument included the consent form and related information about the study (see Appendix C). Participants who agreed to participate in the study were asked to click through to the following section to read instructions on how to proceed with the study. In these instructions, participants were informed that they would be directed to the Dallas Cowboys online store. Participants were asked to "shop this store as if you have a $100 gift card good for any purchase or combination of purchases made throughout the store." Further, participants were asked to "shop through each webpage of the store as you normally would if you were thinking of making an actual purchase using the gift card you have received." To complete the online shopping task, participants were instructed to "select the merchandise item(s) that you wish to purchase, and please write down a brief description (3 to 5 words) of the items on the paper sheet on your desk." A shopping task was employed in this study for the purposes of acquainting and refreshing participants' memories of the online shopping experience.

Because the online store that was active (i.e., live) in the field of practice, participants were instructed not to click away from the online store in any way during the experiment. Further, participants were instructed not to alter computer settings in any way, as this would have deterring effects on their focus and distract them from

performing the shopping task at hand. Finally, before participants were forwarded along to the Dallas Cowboys online store, last instructions were for participants to put on the headsets with which each computer station came equipped.

Participants were randomly assigned to one of the following conditions: sport brand music (conceptually fluent) and popular music (not conceptually fluent). Music in both conditions was set to play before the participants entered the laboratory, and the volume for each computer was set to a level that was consistent across all participants. In addition, music in both conditions was set to play at random, and a "crossfade" enhancement was applied to each of the songs. Setting the songs to play at random assured that every participant would have a slightly different music experience while they completed the shopping task. Further, playing songs at random lessened the likelihood of order effects. Setting the songs to crossfade assured that that songs would not consist of any abrupt pauses or changing during the experiment. The crossfade feature is a popular audio mixing technique employed by disc jockeys and record producers to transition between songs. In this way, the crossfade enhancement applied to each excerpt provided a more "professional" and realistic sound that might be heard in an online store. Lastly, music in both conditions was set to repeat so that participants could start and finish the shopping task at their leisure without affecting the music stimulus.

Instructions informed participants to "remove your headset when you have completed the shopping task and raise your hand so that a research assistant can direct you to the questionnaire." At that point, the participants were assisted in closing down

the online store and opening up the online questionnaire. Participants responded to items measuring the aforementioned variables related to this research, and concluded their participation in the study by providing their demographic information in the closing section of the questionnaire. Once the steps of these procedures were completed, the participants were debriefed about the purpose of the experiment and thanked for their involvement in the study.

CHAPTER IV

RESULTS

Sample Demographics

The participants of this study were college students (N = 250) enrolled in marketing and management classes in a large southwestern university. A summary of sample demographics is provided in Table B-3.The sample was mostly Caucasian (n = 197, 78.8%), although Hispanics (n = 30, 10%), African Americans (n = 10, 4%), Asians (n = 8, 3.2%), and "other" races (n = 5, 1.8%) were represented in this sample. Interestingly, the sample was comprised of a relatively irregular mix of 164 male (65.6%) and 86 female (34.4%) participants. The mean age of the student participants was 21.22 years (SD = 2.23).

Descriptive Statistics

I computed means, standard deviations, and bivariate correlations to understand the relationships between the antecedent variables and shopping outcomes. The results are presented in Table B-4. It is important to note that music was coded as 0 = sport brand music, 1 = popular music. Findings suggests that participants who viewed music as a better fit with the brand (r = -.50, p < .001), expressed more favorable evaluations of the store (r = .47, p < .001), displayed more positive attitudes toward the brand (r = .39, p < .001), and had greater purchase intentions (r = .36, p < .001). In addition, perceived musical fit was significantly associated with atmospheric responsiveness (r = .25, p <

.001), as were favorable evaluations of the store ($r = .19$, $p < .01$), and purchase intentions ($r = .17$, $p < .01$). However, attitudes toward the brand were not significantly related to atmospheric responsiveness.

Model Fit

Hypotheses were tested through observed path analysis using AMOS 7.0 (Arbuckle, 2006). Results yielded relatively good support for the model: χ^2 ($df = 127$, $n = 250$) = 269.98, $p < .001$; RMSEA (90% CI: .06, .08) = .07; CFI = .98; TLI = .96. Figure A-3 provides an illustrative summary of the hypothesized model. Standardized regression weights for scales items of each latent variable are depicted in Table B-5. In comparing model fit statistics of alternative structural equation models, very few differences were found, none of which were statistically significant. As such, I selected to retain the present model on the basis that more parsimony could be obtained given the presence of a moderating variable.

Hypothesis Testing

Hypothesis 1 predicted that sport brand music would be positively related to perceptions of musical fit. This hypothesis was supported ($\beta = -.44$, $p < .001$), demonstrating that participants who heard sport brand music while shopping viewed this music more favorably in terms of fit with brand than did participants who heard popular music. It should also be noted, however, that this effect was qualified by a significant music × atmospheric responsiveness interaction ($\beta = -.13$, $p = .06$). I depict the nature of

this interaction graphically in Figure A-4. Consistent with Hypothesis 7, the results of this interaction reveal that, among participants with low levels of atmospheric responsiveness, there were no significant differences in perceptions of musical fit between sport brand music and popular music conditions. However, among participants with high levels of atmospheric responsiveness, sport brand music was perceived to be a better fit with the Dallas Cowboys brand than was popular music.

Hypothesis 2 predicted a positive relationship between perceptions of musical fit and evaluations of the store, while Hypothesis 3 predicted a positive relationship between evaluations of the store and attitudes toward the brand. Both hypotheses were supported ($\beta = .50$, $p < .001$, and $\beta = .52$, $p < .001$, respectively).

Hypothesis 4, which predicted a positive relationship between musical fit and attitudes toward the brand, was supported ($\beta = .14$, $p < .05$). In addition, Hypothesis 5, which predicted that attitudes toward the brand would have a positive relationship with purchase intentions, was also supported ($\beta = .53$, $p < .001$).

Finally, Hypothesis 6 predicted that favorable perceptions of musical fit would positively relate to purchase intentions. Support for Hypothesis 6 was not demonstrated at the .05 alpha level ($\beta = .11$, $p = .06$).

CHAPTER V

DISCUSSION

The primary purpose for this undertaking was to (a) examine the relationships between sport brand music and shopper's perceptions of musical fit, and (b) investigate the effects of these perceptions on shopping-related outcomes in an online store. More specifically, this research assessed how perceptions of musical fit, influenced by sport brand music, impacted shoppers' evaluations of the store, attitudes toward the brand, and purchase intentions. Moreover, the moderating effect of atmospheric responsiveness on musical fit was ascertained for its effects on the findings. This chapter discusses how these results apply to real world settings. In doing so, a summary of the study's findings is provided, including a recap of the research questions and the results of hypothesis testing employed to answer each of them. In addition, limitations to this research are provided, as well as directions for future research.

Summary of Results

The research questions pertinent to this study and with which the data were analyzed are as follows: What is the influence of brand music on consumer perceptions of musical fit? What is the influence of brand music on shopping outcomes, such as evaluations of the store, attitudes toward the brand, and purchase intentions? How do consumer perceptions and shopping outcomes differ between persons who experience brand music and those who experience popular music in an online retail store? To what

extent does the influence of brand music depend on an individual's responsiveness to atmospheric features in the environment? As a means to explore these research questions, a series of testable hypotheses were presented in Chapter II.

Hypothesis 1 predicted that participants assigned to the sport brand music condition demonstrate more positive perceptions of musical fit than participants assigned to the popular music condition. Correlation statistics demonstrated that the type of music played in during the experiment was significantly associated to the variable of musical fit. In addition, the structural model showed that the SEM model also supported this relationship, demonstrating that participants who heard sport brand music during the shopping task viewed the music more favorably in terms of its fit with brand than did participants who heard popular music while shopping.

Hypothesis 2 predicted that a positive relationship would exist between perceptions of musical fit and evaluations of the store, whereas Hypothesis 3 predicted that a positive relationship would exist between evaluations of the store and attitudes toward the brand. Support was found for both of these predictions equally through the preliminary correlation analysis as well as by observed path analysis statistics. With regard to Hypothesis 2, results indicate that shoppers are likely to evaluate an online store more favorably in instances when background music is perceived to be a good overall fit with the store brand. In relation to Hypothesis 3, previous studies have shown that shoppers will make judgments concerning their attitudes toward the brand based on their evaluations of the store. This view is supported here, as correlation analysis and SEM model results indicate that these two constructs significantly related to each other.

Hypothesis 4 dealt with the relationships between musical fit and attitudes toward the brand, whereas Hypothesis 5 predicted a relationship between attitudes toward the brand and purchase intentions. Support for both of these hypotheses were found, as participants who perceived a greater degree of musical fit in the sport brand music condition had more positive attitudes toward the brand, which in turn led to greater purchase intentions.

Hypothesis 6 predicted that favorable perceptions of musical fit would positively relate to purchase intentions, but it was not supported at a .05 alpha level. However, since purchase intentions are considered most difficult variable to predict in consumer studies involving the use of familiar brands (Machleit, Madden, & Allan, 1990), an increased alpha level of .10 might be acceptable in these circumstances. Therefore, this path was retained in the final model.

The last hypothesis (Hypothesis 7) predicted a moderating interaction between music condition and atmospheric responsiveness on participants' perceptions of musical fit. Support for this hypothesis was found in that, among participants with low levels of atmospheric responsiveness, there were no significant differences in perceived musical fit between the experimental conditions. That is, among participants with high levels of atmospheric responsiveness, individuals who heard sport brand music had more favorable perceptions of musical fit than did individuals who heard popular music.

Finally, results of the observed path analysis yielded relatively good support for the model in terms of fit indices set forth by prior researchers and statisticians (Browne & Cudeck, 1993; Hu & Bentler, 1999; Marsh et al., 2004). Though alternative models

were plausible, as is the case with any structural equation model, the model fit statistics of alternative models did not reveal any significant differences to the one put forth in this study. For example, alternative models might consist of fewer or more variables, or might include direct or partial effects. However, since the present model was a satisfactory fit with the date, and because it was relatively more parsimonious in relation to alternatives, I deemed I appropriate to use in this research.

Implications

Despite the increased scholarly focus on the effects of music in recent years, there remains a void in the literature where sonic branding is concerned. In the field of consumer research, relatively few studies have featured sonic branding as a central focus (see Lusensky, 2010; Fulberg, 2003). Meanwhile, scant research in the area of sport and entertainment marketing has addressed the influence of music in sport settings, and known research on sonic branding in sport contexts has yet to be undertaken. This gap in the literature is both interesting and significant, as previous researchers have observed the prevalent use of music in the marketing of sport products and services (Bennett & Lachowetz, 2004; McLeod, 2006; Wakefield, 1994). Further, research in the field of sport and entertainment has largely gone without the attention of researchers where online shopping is concerned. Previous studies indicate that online shopping is the fastest growing medium through which people intend to spend their money (Forsythe & Shi, 2003). Therefore, research designed to explore this realm of consumer activity and behavior is necessary.

As noted throughout this dissertation, some sport teams are beginning to develop custom and proprietary sport brand music as a strategic and creative marketing vehicle. However, this practice is still novel in the field, and thus many teams at both college and professional levels will be slow to fall in line. The results of this research provide empirical evidence of the effects sport brand music can have on influencing sport consumers' behavior. Rather than playing popular music available to every team at a premium cost, sport brands should look to collaborate with music artists about designing and creating music that the sport business can proprietarily own and manage. In doing so, managers of the sport business might provide information to the music artists regarding the purpose behind the project, including the information about the image or personality of the brand, or demographic information about the audience to which the music is to be directed. Music artists can then use this information to create original music written and arranged specifically with the sport brand in mind. The main objective should be to create a mutual relationship in which both the sport business and the music artist achieve an overall increase in brand equity. More than likely, a consulting agency specializing in sport advertising and music branding will be needed to facilitate this process. In fact, the industry is already booming with such agencies that have been contracted to develop sport brand music and theme music for some of today's most popular sport brands. When used properly, brand music can help a sport business achieve its marketing objectives, enabling the organization to connect with consumers in a way before unrealized.

The results of this study indicate that brand music has significant potential for producing unique and lasting impressions in the minds of consumers. More specifically, if managers can ensure the construction of brand music in such a way that emphasizes the attributes and characteristics of the brand both conceptually and semantically, then chances are good that people will respond favorably to the music consumer settings. In particular, these findings suggest that managers should consider playing brand music in retail shopping environments. Typically, retailers play popular music in retail settings largely to appease the current preferences of the vast majority of consumers. However, this study depicts a scenario where brand-related music surpassed popular music in relation to consumers' perceptions of fit and other shopping related outcomes. Thus, a major implication of this study is one from the standpoint of retailing, as brand music is thought to be more influential of shoppers' behaviors.

Limitations

Charles (1995) indicates that delimitations are reflected in the boundaries and conditions brought forth by the researcher to the study. Accordingly, there is some delimitation to this research to the extent worth noting. Foremost, I have consciously selected the brand music of the Dallas Cowboys to serve as the primary focus of this research. Though identification with the team was examined for its effects on the findings (there were none), it is possible that this variable could impact future studies examining the influence of different brand music on a sample that is more or less identified with the team. Second, the popular music used to draw comparisons consisted

of current top music singles according to the *Billboard* Hot 100 music chart. It is possible that differences in song lyrics among future top music singles could be more or less relevant to the Dallas Cowboys (or other general, yet related, contexts, such as sport or competition), thus resulting in different participant responses. In addition, because I examine behaviors in the context of online shopping, the findings of this study may be limited with respect to observed behaviors traditional retail settings. Lastly, the purposeful use of college students as participants in this study does not allow the findings to generalize to a broader population.

According to McGrath et al.'s (1982) "three-horned dilemma," there is not a research design that can simultaneously maximize the elements of precision, realism, and generalizability (p. 76). Therefore, some limitations outside of my control imposed important constraints on of this study, foremost among them being the experimental nature of the research design. As scholars often assume, experiments conducted in laboratories achieve less external validity than experiments performed in the field (Kerlinger & Lee, 2000). However, the advantage of using laboratories is that one can control for noise parameters that might otherwise be difficult to detect. In addition, researchers argue that the results from online domains "can have external validity equal to or even better than that of traditional methods, depending on the research question" (Horton, Rand, & Zeckhauser, 2010, p. 1).

A second limitation concerns the use of a self-administered questionnaire to collect research data. Due to the observation that study participants oftentimes respond to experimental conditions in a socially desirable fashion, some researchers argue that

experimenters should not assume that responses to questionnaire items are always completely accurate or in accordance with participants' true feelings and beliefs (Crowne & Marlowe, 1964). However, the questionnaire was completed voluntarily and privately; therefore, it is assumed that participants responded honestly and truthfully to the questions asked.

A final limitation in this study involves the possibility for sample bias in the design of the research. It has been suggested that the "homogeneity of college students translates into stronger hypothesis tests than if nonstudents were the research subjects" (Peterson, 2001, p. 453). Nevertheless, previous researchers have shown that "greater homogeneity does not appear to uniformly translate into more powerful hypothesis tests or larger effect sizes than would be observed for samples of nonstudents" (Peterson, 2001, p. 458). However, it should be noted that future studies correcting the uneven mix of male and female participants present in this study might uncover some hidden meanings in relation to gender differences. To this end, future research obtaining data from a larger representation of minorities and older age groups might further substantiate these findings to a larger population, or provide alternative results that are equally significant.

Future Directions

The first and foremost direction of this research points in the direction of the traditional retail store. While this study shows significant effects and interactions related to online shopping, follow up studies are needed in relation to shopping behaviors in the

traditional brick-and-mortar retail store.

In addition, future researchers should conduct experiments using online retail stores in field settings. That is, although this research consisted of a "live" online store, the laboratory setting in which I collected data may have led to responses that might otherwise have been different in the real world. Future studies should work together with firms to research the effects of music using "real" shoppers in "live" settings.

Future studies might also look at whether sport brand music leads to more positive effects on sport consumers than does general "sport music." As opposed to popular music, sport music consists of songs that per chance relate closely to various sport settings (e.g., events, teams, athletes). For decades, sport teams and businesses have applied upbeat and motivational music to their marketing strategies. However, with more and more teams opting to create their own music, research is needed to evaluate which type of music (i.e., sport brand music or general sport music) sport consumers and spectators prefer in different sport contexts. For example, the Dallas Cowboys music used in this research was clearly a better fit when it was played in the background of the Dallas Cowboys online store. However, it would be interesting to test if the same music was perceived the same in the event setting at Cowboys Stadium. While this research demonstrates significant differences in favor of sport brand music in a retail-shopping environment, sport event settings typically feature music that is entirely different from that played in a shopping scenario. Thus, future researchers might consider investigating sport event settings for differences between sport brand music and general sport music and compare them to this research.

Future researchers are also encouraged to consider sonic branding efforts in terms of branding benefits garnered by the music artist. Sport teams and sport businesses provide unique distribution channels through which the artist can increase exposure. As such, these outlets provide an alternative means for music artists to enhance their popularity and potentially boost sales of artist-related products and services. For example, sport teams play in relatively large venues in front of tens of thousands of sport fans for the better part of a year, a kind of audience most music artists are hardly ever exposed to. In addition, sport teams have the money to push aggressive marketing strategies of such projects. Relative to this research, the Dallas Cowboys partnered with music artist Cowboy Troy to create a song (titled "Cowboy Stomp") and video to be played behind TV advertising and during promotions in the new Cowboy Stadium. Such advertising and marketing methods are expensive and relatively uncommon in the music industry. However, because the Dallas Cowboys were willing to front the bill, Cowboy Troy was able to reap the benefits of such mass exposure. Future researchers should examine sport consumers' opinions of music artists featured in sport brand music, and how perceptions of musical fit affect these opinions.

CHAPTER VI

CONCLUSION

The results of this investigation provide valuable insights into the effects of sport brand music on sport consumer behavior. More generally, the findings speak to the increased understanding and enhanced use of music by sport brands in online shopping environments. In addition, the results presented here provide some new discussion on how the theoretical perspectives of conceptual fluency and semantic relevance might relate to the influence of song lyrics in consumer settings. Furthermore, given the shortage of research on music sport marketing and management literature, I have effectively introduced a world of scholarly opportunities with the addition of this study.

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APPENDIX A

LIST OF FIGURES

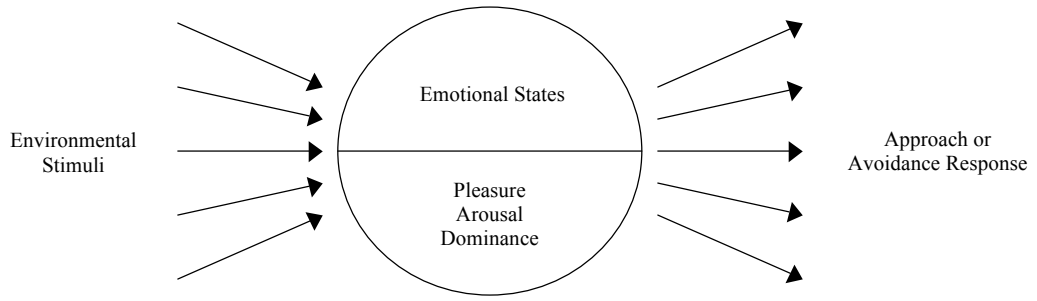

Figure A-1

The Mehrabian-Russell model of environmental influence (Mehrabian & Russell, 1974)

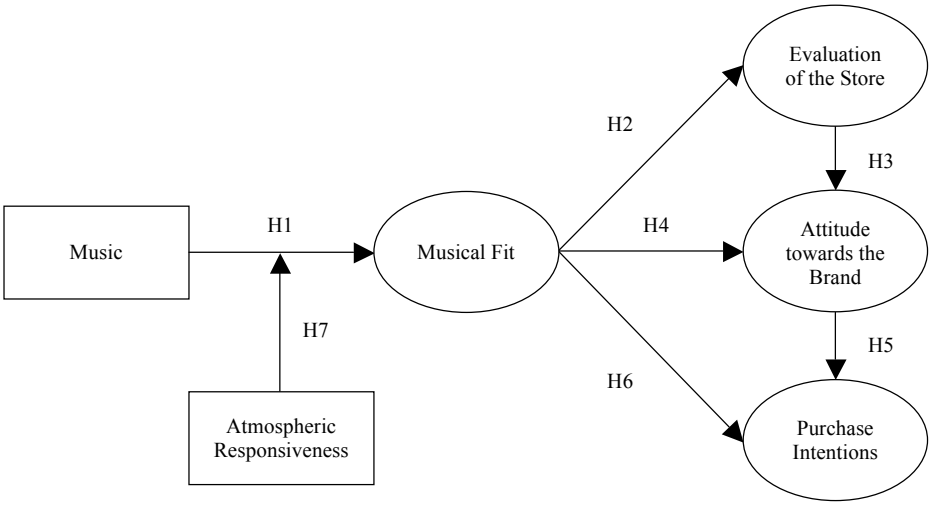

Figure A-2

Illustrative summary of study predictions

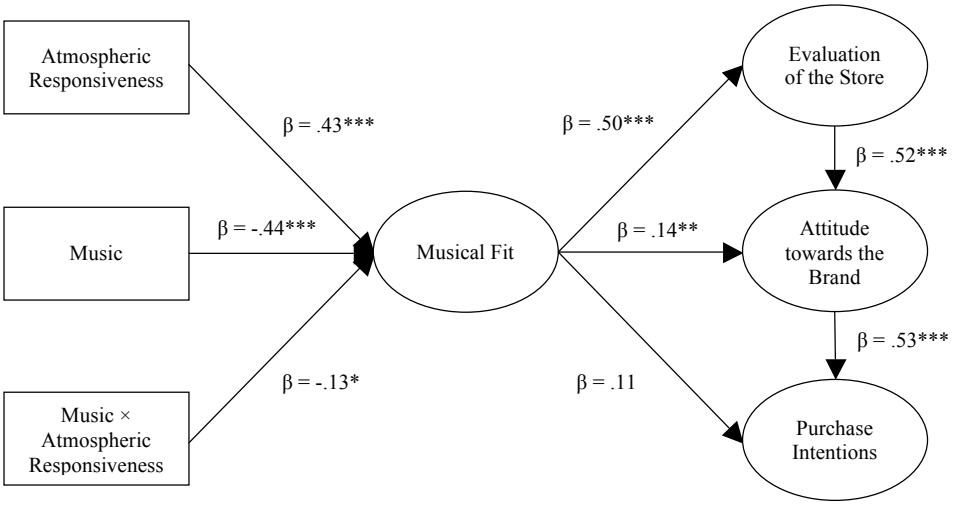

Figure A-3

*Illustrative summary of hypothesized model. * p = .06. ** p < .05. *** p < .01*

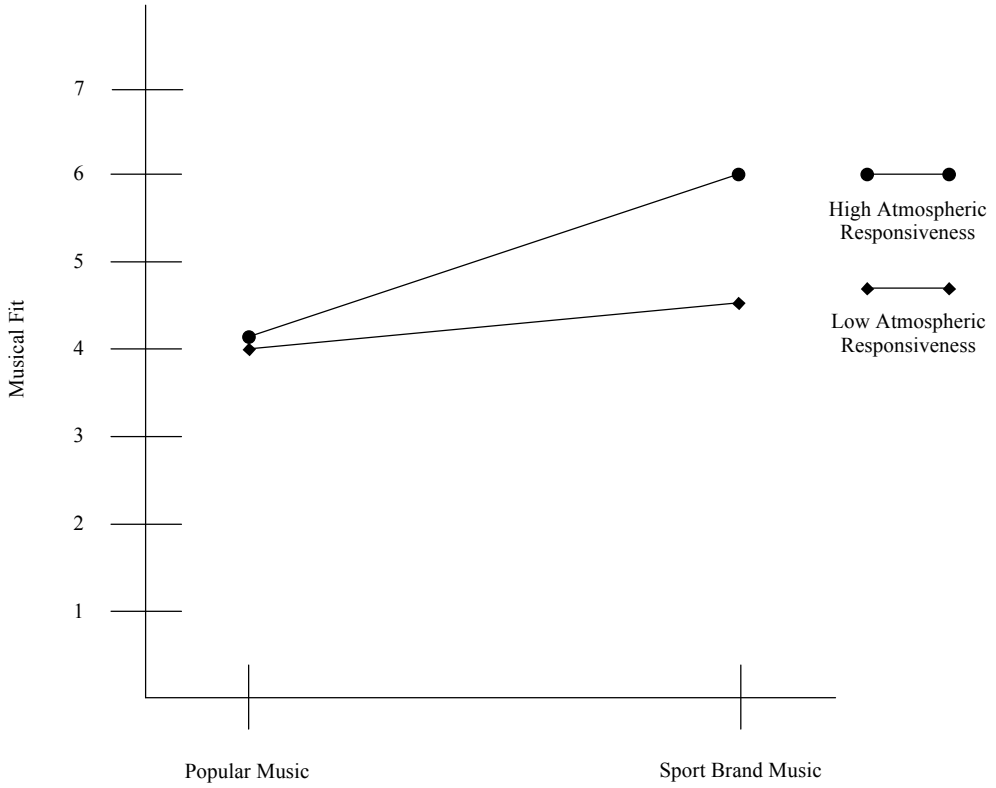

Figure A-4

Results of moderation analysis testing the effects of music and atmospheric responsiveness on musical fit

APPENDIX B

LIST OF TABLES

Table B-1

List of music conditions and song selections

Music Condition	Music Artist – Song Title
Condition I: Official Music of the Dallas Cowboys[a]	Cowboy Troy – Cowboy Stomp Johnny Black Gang – Swing It Around (Cowboy Town) Los Lonely Boys – Let's Go Cowboys Three King Circus – Get Rowdy Cowboys Three King Circus – Cowboys' House
Condition II: *Billboard* Hot 100[b]	Katy Perry – E. T. Lady Gaga – Born This Way Black Eyed Peas – Just Can't Get Enough Cee Lo Green – Forget You Adele – Rolling In The Deep

[a] Songs were selected from the music album titled *Get Rowdy: Official Music of the Dallas Cowboys.*
[b] Songs were selected from the *Billboard* Hot 100 annual charts , which annually rank the top 100 singles based on radio airplay and recording sales, regardless of genre. Songs represent the Top 5 singles on the *Billboard* Hot 100 on April 15, 2011.

Table B-2

List of measures and scale items

Scale	Items
Evaluation of the Store[a]	a. How favorable is your opinion of the online store? b. How pleasant was your experience while shopping the online store? c. How would you describe your overall evaluation of the online store? (Based on Spangenberg, Grohmann, and Sprott, 2005)
Attitude towards the Brand[a]	a. How favorable is your attitude toward the Dallas Cowboys? b. How would you describe your attitude toward the Dallas Cowboys? c. How much do you like the Dallas Cowboys? d. How would you describe your overall attitude toward the Dallas Cowboys? (Based on MacKenzie and Lutz, 1989)
Purchase Intentions[b]	a. I would patronize this online store. b. I would purchase products or services from this online store. c. I plan to purchase form this online store in the near future.. (Based on Notani, 1997)
Musical Fit[b]	a. I think the music is suitable for this online store. b. I think the music is suitable for my shopping experience in this online store. c. I think the music fits well with the products sold in this online store. d. I think the music goes together well with other online store features. e. I think the music fits well with the image and personality of the Dallas Cowboys. (Based on Macinnis and Park, 1991)
Music Likability[a]	a. How likable was the music played in the online store? b. How pleasant was the music played in the online store? c. How would you describe your overall opinion of the music played in the online store? (Based on Macinnis and Park, 1991)
Fan Identification[a]	a. How important is it to you that the Dallas Cowboys win? b. How strongly do you see yourself as a fan of the Dallas Cowboys? c. How strongly do your friends see you as a fan of the Dallas Cowboys? d. During the NFL season, how closely do you follow the Dallas Cowboys via any of the following: in person or on television, on the radio, or televised news or a newspaper? e. How important is being a fan of the Dallas Cowboys to you? f. How much do you dislike the greatest rivals of the Dallas Cowboys?[c] g. How often do you display the Dallas Cowboys' name or insignia at your place of work, where you live, or on your clothing? (Based on Wann and Branscombe, 1993)
Atmospheric Responsiveness[b]	a. I pay attention to the store environment when I go shopping. b. Store elements like music, colors, and lighting in a store make a difference in evaluating my shopping experience. c. I find myself making shopping decisions based on how the store looks. d. Store decor influences my decisions about where I shop. (Based on Eroglu, Machleit, and Davis, 2003)

[a] Items were measured using a 7-point semantic differential scale.
[b] Items were measured using a 7-point Likert-type (1 = *strongly disagree*, 7 = *strongly agree*).
[c] Items are reverse coded.

Table B-3

Demographic information of participants

Average age, y	21.2
Gender, %	
Female	34.4
Male	65.6
Ethnicity, %	
White/Caucasian	78.8
Black/African American	4.0
Hispanic	10.0
Asian/Pacific Islander	3.2
Other or no answer	1.8

Table B-4

Means, standard deviations, and bivariate correlations of antecedent variables and latent variables

Table	M	SD	1	2	3	4	5	6
1. Music [a]	.53	.50	–					
2. Atmospheric responsiveness [b]	4.70	1.13	-.24	–				
3. Musical fit [b]	4.74	1.53	-.50	.43	–			
4. Evaluation of the store [c]	4.96	1.32	-.25	.28	.47	–		
5. Attitude towards the brand [c]	4.68	1.58	-.28	.17	.40	.54	–	
6. Purchase intentions [b]	2.73	1.50	-.28	.28	.36	.34	.58	–

[a] Music was coded as 0 = sport brand music, 1 = popular music.
[b] Items were measured using a 7-point Likert-type (1 = *strongly disagree*, 7 = *strongly agree*).
[c] Items were measured using a 7-point semantic differential scale.

Table B-5

Standardized regression weights for scale items of latent variables

Measure	Scale Item	Estimates
Musical Fit	MF1	.81
	MF2	.88
	MF3	.95
	MF4	.88
	MF5	.82
Evaluation of the Store	ES1	.86
	ES2	.88
	ES3	.84
Attitude towards the Brand	AB1	.95
	AB2	.95
	AB3	.93
	AB4	.93
Purchase Intentions	PI1	.89
	PI2	.97
	PI3	.97

APPENDIX C

CONSENT FORM

Dear Student:

I would like to request your participation in a study of consumer behavior in retail environments. Researchers in the Center of Retail Studies at Texas A&M University are conducting research to understand the influence of shopping environments of online retail stores on consumers' attitudes and behaviors.

Your participation in this study will require approximately 15 minutes of your time to complete a shopping task and answer a questionnaire. The risks associated with this study are minimal and no greater than risks ordinarily encountered in daily life.

You will not receive any benefit by participating in this survey; however, your participation will allow researchers to become more familiar with consumer shopping behaviors. You may decide not to participate or to withdraw at any time without your relations with Texas A&M University being affected.

The records of this study will be kept private. No identifiers will be included in any sort of report that might be published. Research records will be stored securely and only the primary research listed below will have access to the records.

This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices by phone at (979) 458-4067 or by e-mail at irb@tamu.edu.

Please be sure you have read the above information, asked questions, and received answers to your satisfaction. If you would like to participate in the study, please provide your consent by printing and signing your name below.

Sincerely,

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Print: _____ Sign: _____

VITA

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