The Matching Effect of Brand and Sporting Event Personality: Sponsorship Implications

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By investigating the personality congruence between brands and sporting events, this study explores which brands and sporting events fit together best. The results of our survey, which included 373 student-subjects, showed that the pairing of “sincerity” brands and “diligence” sporting events yielded the best brand-event personality fit and sponsorship effectiveness. Through structural-relationship testing, this study confirmed that the personality congruence between a sponsoring brand and a sporting event was the most significant attitude predictor toward the sponsoring brand.

Sponsoring sporting events has attracted the eye of marketers who seek to reach target markets by sponsoring events that are highly relevant to their customers (Roy, 2005). According to the IEG Sponsorship Report (2006), corporate spending on global sponsorship was estimated at $37.7 billion in 2007, and approximately 66% of all sponsorship expenditures were allocated to sporting events. Sporting events are one of the fastest growing marketing communication vehicles, and their rate of growth in marketing expenditures has outrun traditional media advertising and sales promotion (Roy & Cornwell, 2003). For example, companies in North America have increased sporting events sponsorship spending to $9.9 billion in 2007, up about 11% from $8.6 billion in 2006 (IEG, 2006).

Researchers have found that people attribute human personality traits to various product and service brands (Aaker, 1997; Brown, 1991; d’Astous & Lévesque, 2003; Fournier, 1998; Plummer, 1985). For instance, Aaker (1997) suggested that people attribute aspects of human nature to product brands, and found five brand personality dimensions: “sincerity,” “excitement,” “competence,” “sophistication,” and “ruggedness.”

However, in spite of the significant growth in and the marketing implications of sporting event sponsorship, it is interesting to note that little is known about whether sporting events have their own personality dimensions that reflect human personality dimensions. While interest in sporting event sponsorship has recently grown among both researchers and practitioners, there has been no effort to develop a reliable, generalizable, and valid scale that measures sporting event personalities.
personalities (Lee & Cho, 2007). Furthermore, in spite of an ongoing increase in sporting event sponsorship spending, few researchers have provided marketing practitioners with guidance about which sporting events to sponsor and how consumers perceive sponsoring brands (Gwinner, 1997; Speed & Thompson, 2000).

As an initial step to developing a theoretical structure of sporting event personalities, Lee and Cho (2007) postulated that human personality traits can be also attributed to sports and sporting events. According to them, sports and sporting events have five distinct dimensions: “diligence,” “uninhibitedness,” “fit,” “tradition,” and “amusement.” These are differentiated from human personality traits (the Big Five) as well as Aaker’s brand personality traits. They also indicated that the scale which was developed to measure sporting events personalities was not only reliable but also a valid measurement system. Furthermore, they tested a theoretical model specifying the structural relationship between the five sporting event personality dimensions, as well as other pertinent constructs. These included aspects such as attitude toward the sporting event, sponsorship evaluation, and attitude toward the sponsoring brand (Lee & Cho, 2007).

Some researchers in the field of marketing have suggested that the sporting event image can be linked with and transferred to a brand through sponsoring activities (Gwinner, 1997, 2005; Gwinner & Eaton, 1999; Keller, 1993). For example, Gwinner (1997) suggested a model of image creation and image transfer in sponsorship by identifying several factors that moderate the relationship between event image and sponsoring brand image. Given that human personality traits can be attributed to brands and sporting events, it is imperative to assess the extent to which matching occurs between the sponsoring brand and the personality of the sporting event. As sporting event sponsorships continue to grow as marketing communication tools, they become a viable contemporary alternative to traditional advertising (Lardinoit & Derbaix, 2001). In sum, the purpose of this study is to determine the best matching combinations of sporting events and sponsoring brands as a way of maximizing sponsorship effectiveness. More specifically, this study investigates the matching effects between the sponsoring brand and the sporting event personality dimensions, as well as consumer responses to sponsorship. By investigating personality congruence between sporting events and sponsoring brands, this study is designed to find out which brands best correlate to specific sporting events.

**Previous Research**

**Brand Associations**

Researchers have long suggested that the perceptions (or personality) associated with a brand go beyond functional product-related attributes and benefits. These perceptions also relate to demographic characteristics (e.g., gender, age, and social class) and nonfunctional, symbolic qualities (Levy, 1959; Martineau, 1958). Particularly during the last two decades, there has been increased research on understanding and measuring brand personality in the field of marketing and consumer behavior. Because brand personality is considered to be a useful means of com-
munication for increasing consumer preference for and usage of a brand by differentiating a brand in a product category, both researchers and practitioners have given considerable attention to brand personality (Aaker, 1997; Biel, 1992; Keller, 1993, 2003; Sirgy, 1982).

Brand personality can be described as human personality traits that consumers perceive brands to possess (Aaker, 1997; Batra, Lehmann, & Singh, 1993). Consumers view a brand as a person with whom they may choose to have a relationship (Blackston, 2000). According to Sweeney and Brandon (2006), consumers can easily view a brand as having a friendly or exciting personality due to advertisers’ continuous attempts to humanize and anthropomorphize the brand. For instance, Coca-Cola is often perceived by consumers as more “cool, all-American, and real,” while Pepsi is viewed as being more “young, exciting, and hip,” and Dr. Pepper is portrayed as being more “nonconforming, unique, and fun” (Aaker, 1997, p. 348).

However, although the concept of brand personality has been widely studied, little effort had been made to develop a scale for measuring brand personality until Aaker’s brand personality dimension study was published. In fact, both academic researchers and practitioners have inevitably borrowed human personality traits from the domain of psychology, primarily because little research on brand personality has been conducted in the marketing field (Aaker, 1997) in spite of its significant marketing implications. As a result, questions naturally arise as to whether brand personality has a construct or trait dimensions similar to or different from the “Big Five” aspects of human personality (Aaker, 1997). For example, Caprara, Barbaranelli, and Guido (2001) argued that since the structure of the “Big Five” human personality traits is different from brand personality, it could not be replicated in the context of brands.

Along these lines, Aaker (1997) argued that even if human and brand personality might overlap with each other (i.e., agreeableness and sincerity, extroversion and excitement, conscientiousness and competence), brand personality should differ from human personality. In line with this notion, some researchers have argued that human personality traits are formed on the basis of an individual’s behavior, physical characteristics, attitudes, and beliefs (Park, 1986), whereas brand personality traits are formed through the direct or indirect contact the consumer has with the brand (Plummer, 1985).

In an attempt to shed some light on this issue, Aaker (1997) developed the framework of brand personality dimensions and a 42-item brand personality scale. In her study, Aaker first borrowed 337 unique traits from previous measures used in psychology and marketing research. These borrowed traits were supplemented with a qualitative free-association task, which added 295 unique traits to the list of personality traits. A total of 309 nonredundant traits were generated and were later reduced to a more manageable size, thereby leaving 114 personality traits to be used in the study. A total of 631 subjects rated how well each of the 114 personality traits described each of the 37 brands. After averaging the scores of each brand on each personality trait across subjects, she factor-analyzed the between-brand variance and generated five distinct brand personality dimensions: “sincerity,” “excitement,” “competence,” “sophistication,” and “ruggedness.”
Sporting Event Personality

It is interesting to note that the literature on sporting event sponsorships is extensive, whereas there have been no studies on the personality of sporting events themselves despite their significant growth and marketing implications (Lee & Cho, 2007). Although brand managers and marketers tend to believe that sponsoring sporting events that are closely related to their brand personality (or image) yields better results than sponsoring unrelated sporting events, there have been some questions about whether the same or different brand personality traits apply to sporting events (Lee & Cho, 2007). Thus, understanding how consumers perceive sporting events in terms of human attributes is likely to be useful for the elaboration and implementation of marketing actions because the sporting events can be considered brands in their own right. This makes it important for marketers to incorporate their brand personality dimensions when they are making sponsorship selection decisions (Lee & Cho, 2007). According to Meenaghan’s focus-group research (2001), different events have different personality associations. For instance, the personality traits associated with ballet or classical music events are “sophisticated,” “elite,” “discriminating,” “up-market,” “serious,” and “pretentious,” whereas the personality associated with mass arts are “young,” “accessible,” “friendly,” “current,” “innovative,” and “commercial” (Meenaghan, 2001). He confirmed that each sponsored event has its own distinct personality characteristics, and that the image of the sponsored event is transferred to the sponsoring brand (Meenaghan, 1983, 2001).

It might be possible to simply use a brand personality scale to measure the personality of a given sporting event. However, the personality of a sporting event can be differentiated from the brand personality of a sponsor insofar as there is a different source of inference as well as a different valence of personality traits (Lee & Cho, 2007). First, brand personality traits are formed through product-related attributes, product category associations, brand name, symbol or logo, advertising style, price, distribution channel, user imagery, the company’s employees or CEO, and brand endorsers (Aaker, 1997), whereas the vast majority of sporting event personality is inferred from consumer’s vicarious interaction with players or their performances (Csikszentmihalyi, 1975; Lee & Cho, 2007; Madrigal, 2006). This unique source inference for personality structure is seldom found in the case of a brand (Lee & Cho, 2007). Second, while the brand personality scale contains only positive personality traits, both positive and negative personality attributes might characterize a sporting event personality (Lee & Cho, 2007). For example, the traits associated with the NBA All-Star Game might be show-off, arrogant, and aggressive.

The initial study investigating the theoretical structure of sporting event personality was published very recently (Lee & Cho, 2007). This study examined whether human personality traits can also be attributed to sports and sporting events and developed a theoretical structure of sporting event personality including a scale for measuring this personality. Through confirmatory factor analysis, they developed five sporting event personality dimensions (“diligence,” “uninhibitedness,” “fit,” “tradition,” and “amusement”) representing 24 personality traits. The reliability and validity of the developed five dimensions of sporting events were supported through the empirical testing of a theoretical model, which speci-
fied the structural relationship between the five sporting event personality dimensions and other pertinent constructs (2007). Lee and Cho (2007) demonstrated that sporting event personality dimensions were related to attitudes toward the sporting event, which, in turn, led to positive sponsorship evaluation of the sporting event and favorable evaluation of the brands sponsoring the sporting event.

Sponsorship of Sporting Events

Meenaghan (1983) defined sponsorship as “the provision of assistance either financial or in kind to an activity by a commercial organization for the purpose of achieving commercial objectives” (p. 9). Marketers and brand managers for corporate sponsors hope that sponsorship activities can increase brand awareness and build, strengthen, or change brand image or associations by linking sponsored events and sponsoring brands emotionally and cognitively (Cornwell & Maignan, 1998; Gwinner, 1997; Javalgi, Traylor, Gross, & Lampman, 1994; Keller, 1993; Madrigal, 2001; Meenaghan, 1991). Similar to a celebrity endorsement in advertising, targeted consumers can be indirectly persuaded by sponsorship activities because they tend to associate the image of a sporting event with the sponsoring brand (Keller, 1993; McCracken, 1989). In line with this notion, Gwinner (2005) suggested that the sporting event associations retained in the mind of the consumer can be also transferred to the sponsor’s brand, and serviced by pairing consumer knowledge of a sporting event with a brand. The degree of image transfer varies according to sporting type, consumers’ prior experiences, event characteristics, event identification, brand-event fit, and sponsoring clutter (Gwinner, 2005). Specifically, the match between a sporting event and a sponsoring brand is critical to convey the right message to the right consumers (Crimmins & Horn, 1996; McDaniel, 1999). If the image associated with a particular sporting event is mismatched with the lifestyles and interests of the targeted market, the sponsor fails to reach the targeted consumers and to convey the proper message or association (Crimmins & Horn, 1996).

However, even if more and more companies have increasingly used these viable tools of persuasion, there is little guidance for them about what sporting events to sponsor and how to exploit their resources efficiently and effectively (Crimmins & Horn, 1996; Speed & Thompson, 2000). Furthermore, to date, few sporting event sponsorship research studies have examined how consumers perceive a brand-event fit and how consumers react to sponsorships from specific conceptual or theoretical perspectives (Cornwell & Maignan, 1998; Cunningham & Taylor, 1995; Gwinner, 1997; Javalgi et al., 1994; Meenaghan, 1991). Consequently, some have called for research to develop underlying theoretical structures and conceptual foundations which can better explain how sponsored sporting events result in sponsoring brands influencing consumer reaction. How this sponsorship works remains an open question (Cornwell & Maignan, 1998; Gwinner & Eaton, 1999; Javalgi et al., 1994; Meenaghan, 1999). Thus, one of the purposes in this study is to gain insight into the perception of sponsoring brands, particularly with regard to matching the brand with the sporting event personality dimensions.

By extending the concept of image transfer from the marketing and sporting events literature, this study suggests that personality congruence between
sponsoring brands and sponsored sporting events might have a significant impact on the consumer evaluation of the sponsoring brands. In other words, given that human personality traits can be attributed to brands and sporting events, it is imperative to explore the best matching combination of brand and sporting event personality dimensions, to attempt to assess the effect of brand-event fit when evaluating the sponsoring brands.

**Personality Congruence Between Brands and Sporting Events**

The vast majority of sponsorship literature considers the value of congruence or match between the sponsoring brand and the sponsored event. Congruence has been defined as the degree to which the direct or indirect relevance between the sponsor and the event exists (McDonald, 1991). It suggests that the extent to which consumers perceive a fit between a sponsor and a sporting event is positively related to desired responses, such as increased recall, a favorable attitude toward the sponsoring brand and a higher intention to purchase the advertised product (e.g., Cornwell, 1995; Crimmins & Horn, 1996; Gwinner, 1997; Gwinner & Eaton, 1999; Johar & Pham, 1999; McDaniel, 1999; Speed & Thompson, 2000; Stipp & Schiavone, 1996). For instance, consumers would more favorably evaluate a sponsorship when there was a greater congruence between the sponsoring brand and the sponsored broadcast (Bloxham, 1998). Congruence theory suggests that consumers best remember congruent information associated with their prior expectations, since memorized information and its retrieval is influenced by similarity or relatedness between sponsoring brands and sponsored sponsorship (Cornwell, Weeks, & Roy, 2005; Mandler, 1982; Srull, 1981). For instance, an auto manufacturer sponsoring an auto racing event seems to yield high brand-event congruence which can be easily remembered and recalled.

This congruence effect can occur when a brand has either a functional- or image-based similarity with a sporting event. Gwinner and Eaton (1999) found that when brands and sporting events were matched on either functional or image bases, the respondents tended to perceive similarity between them and transfer the sporting event image to the brand. Speed and Thompson (2000) suggested that congruence between a brand and a sporting event has a significant influence on sponsorship outcomes, such as attitudes toward the sponsoring brand and purchase intention. Similarly, Kinney and McDaniel (1996) found that Visa’s sponsorship of the Olympic Games has created a favorable attitude toward its ads and brand. This includes a higher purchase intention, which resulted from advertising a congruent personality association between Visa and the Olympic Games, such as excitement and prestige. Furthermore, other studies have found that the nature of the relationship between a brand and a sporting event and the association of a certain product category with a certain sporting event can influence the degree of congruence (Cornwell, 1995; McDaniel, 1999).

Extending the concept of congruence from marketing and sporting events literature, this study postulates that the personality congruence between sponsoring brands and sponsored sporting events can have a significant influence on evaluation of the sponsoring brands. In other words, brands would benefit more from sponsoring sport events consistent with the brand’s personality. More specifically,
it is hypothesized that the personality congruence between sporting events and
sponsoring brands might affect consumer responses to sponsorship, such as atti-
ditudes toward the sponsoring brand and purchasing intention of the sponsoring
brand. This discussion leads to the following hypothesis:

H1: Attitude toward the sponsoring brand will be positively associated with
personality congruence between the sponsoring brand and the sporting event.

According to Speed and Thompson (2000), a consumer’s response to a brand
sponsoring a sporting event can be affected by her or his prior experience with the
brand and the sporting event as well as perceived congruence between the two.
Dean (2002) suggested that consumers’ different prior attitudes toward the spon-
soring brand influence the degree of attitude changes. In other words, people who
have prior positive attitudes toward a brand are more likely to favorably evaluate
the brand sponsoring any sporting events (e.g., I like Nike no matter which sport-
ing events it sponsors). Based on the above discussion, the second research
hypothesis is generated:

H2: Attitude toward the sponsoring brand will be positively associated with
prior attitude toward the brand.

Similarly, prior attitudes toward a given sporting event might positively influ-
ence consumer evaluation of the brand sponsoring the sporting event. In other
words, people might favorably evaluate the brands that sponsor a sporting event
because they like the sporting event (e.g., I like the brands sponsoring U.S. Open
Tennis because I like U.S. Open Tennis). Therefore, we can generate another
research hypothesis:

H3: Attitude toward the sponsoring brand will be positively associated with
prior attitude toward the sporting event.

It would be also interesting to compare the relative importance in predicting
attitude toward the sponsoring brand among the three above-mentioned predictors
(personality congruence, prior attitude toward the brand, and prior attitude toward
the sporting event). Accordingly, the following research question is generated:

RQ: Among predictors (prior brand attitude/ prior event attitude/ personality
congruence), which predictor has a greater influence on attitude toward the spon-
soring brand?

Finally, based on the extant literature on the positive relationship between
attitude toward the brand and purchase intention (Ajzen & Fishbein, 1980; Doll &
Ajzen, 1992), we also postulate a final hypothesis:

H4: Attitude toward the sponsoring brand will lead to higher purchase inten-
tion of the sponsoring brand.

**Method**

**Selection of Target Stimuli**

To select a comprehensive and representative set of brands and sporting event
personality dimensions (Aaker, 1997; Lee & Cho, 2007), real brands and sporting
events were employed with a different procedure, respectively.

First, to find appropriate brands representing each of Aaker’s five brand
personality dimensions, a pilot survey was conducted with a sample of 51
undergraduate students (74.5% female, mean age = 21.2) enrolled in two different
communication courses at a large southeastern university. Almost all participants used English as their primary language (94.1%). All students were given extra credit for participating in the study. Each participant was randomly assigned to one of two different brand groups and asked to indicate the degree to which they perceived each of Aaker’s 42 personality traits on series of 5-point semantic differential scales (1 = not at all descriptive, 5 = extremely descriptive) preceded by a particular brand. By adopting the 37 brand stimuli used by Aaker (1997) that represent symbolic, utilitarian, and both symbolic and utilitarian functions across product categories, this study conserved the generalizability of the findings. In addition, one brand, i.e., Levi’s, was included in every group to compare participants’ brand personality perceptions with the other group members. There were no statistically significant differences in the mean ratings of Levi’s between the two groups, which secured “high levels of agreement of the human characteristics associated with a particular brand” (Aaker, 1997, p. 349). Through this process, two representative brands whose mean scores were highest were selected for each of five brand personality dimensions respectively (e.g., Sincerity: Hallmark and Cheerios; Excitement: Apple and Pepsi; Competence: Sony and Visa; Sophistication: Lexus and Olay; Ruggedness: Michelin and Lee). Each selected brand showed a relatively high mean score on one dimension and low mean scores on other dimensions. Therefore, this process left a set of 10 brands selected for this study.

Second, to select representative sporting events which displayed the five different sporting event personality types (Lee & Cho, 2007), the original data of Lee and Cho’s study was used. Among 48 sporting events, two sporting events were chosen for each of five dimensions that showed the highest mean scores (e.g., Diligence: Figure Skating and U.S. Open Tennis; Uninhibitedness: X Games 12 and Auto Racing; Fit: Tour de France and Soccer; Tradition: British Open Golf and Kentucky Derby; Amusement: NCAA Football Championship and NBA Playoff). However, some sporting events whose mean scores were ranked at the highest level across each dimension were excluded from the list (e.g., Super Bowl, Football, Olympic Games). This was done to maintain the study criterion that each selected sporting event should possess a relatively high mean score on one dimension and low mean scores on the other dimensions. This step resulted in 10 sporting events for the study.

This selection process yielded ten brands and ten sporting events representing five brand and five sporting event personality dimensions.

**Participants and Procedure**

To examine the best matching effects between each of the five brand and sporting event personalities, a survey was conducted with a total of 373 subjects. The subjects consisted of 194 female (52%) and 179 male (48%) undergraduate volunteers (mean age = 20.6, \( SD = 1.66 \)), who received extra course credit for participation.
To minimize participants’ response bias resulting from fatigue and boredom due to a large number of target stimuli, each participant was randomly assigned to one of two different groups. Each group had five different brands paired with five sporting events. Thus, each subject responded to a total of 25 \((5 \times 5)\) different brand and sporting events pairings (see Table 1). At the commencement of each survey, one of the authors read a script explaining the purpose of the study and instructions for the participants.

**Measures**

Participants’ prior attitudes toward each of 10 brands and each of 10 sporting events were measured by two 7-point semantic differential scale items (Overall, my attitude toward _____ is: 1 = bad, 7 = good; 1 = unfavorable, 7 = favorable). Examination of participants’ perceived personality congruence between sponsoring brands and sporting events was assessed by three 7-point Likert scale items (1 = very strongly disagree; 7 = very strongly agree). The three measures were: (1) The (sporting event name) and (brand name) have a similar personality; (2) the personality I associate with (brand name) is related to the personality of the (sporting event name); (3) my personality of the (sporting event name) is very different from the personality I have of (brand name). These items were modified from a previous study on a sporting event’s image transfer to a brand through sponsoring (Gwinner & Eaton, 1999). To examine the best matching combination of brand and sporting event personality dimensions, the five brands and five sporting events representing each of the dimensions were combined to form 25 possible different pairs of brands and sporting events. Attitudes toward each of the 25 pairs of brand-sporting events was measured by four 7-point semantic differential scale items—Overall, my attitude toward the (brand name) sponsoring (sporting event) is: negative/positive; unfavorable/favorable; bad/good; and dislikeable/likable. Finally, participants’ intentions to purchase the sponsoring brand were assessed by a 7-point Likert item—I would like to purchase the (brand name) sponsoring (sporting event name): 1 = very strongly disagree; 7 = very strongly agree.

Since most measurement items used in this study were modified by the researchers, we had to perform a four-step measurement purification process: (1) an exploratory factor analysis to discover the items that deviate from the common core of items and to produce additional dimensions (Churchill, 1979); (2) a confirmatory factor analysis for the final verification of the dimensions (Gerbing & Anderson, 1988); (3) a reliability test of the final scales; and (4) a calculation of construct validity (Hair, Anderson, Tatham, & Black, 1995). The results from the first-order confirmatory factor models showed that the item-loading estimates on their factors were significant \((p < .01;\) see Table 2). Goodness-of-fit indices also demonstrated the quality of all models. The reliability coefficient alpha for each construct was higher than .80. Finally, construct validity for each construct was calculated manually following Hair et al. (p. 642), and the coefficients were all above the rule of .50.
Table 1  Pairings of Brands and Sporting Events

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<th>Group 1 (5X5)</th>
<th>Group 2 (5X5)</th>
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<td>Brand</td>
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<td>Sporting Event</td>
<td>Sporting Event</td>
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<td>Hallmark (Sincerity)—Figure Skating (Diligence)</td>
<td>Cheerios (Sincerity)—U.S. Open Tennis (Diligence)</td>
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<td>Hallmark (Sincerity)—X Games 12 (Uninhibitedness)</td>
<td>Cheerios (Sincerity)—Auto Racing (Uninhibitedness)</td>
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<td>Hallmark (Sincerity)—Tour de France (Fit)</td>
<td>Cheerios (Sincerity)—Soccer (Fit)</td>
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<td>Hallmark (Sincerity)—British Open Golf (Tradition)</td>
<td>Cheerios (Sincerity)—Kentucky Derby (Tradition)</td>
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<td>Hallmark (Sincerity)—NCAA Football (Amusement)</td>
<td>Cheerios (Sincerity)—NBA Playoff (Amusement)</td>
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<td>Apple (Excitement)—Figure Skating (Diligence)</td>
<td>Pepsi (Excitement)—U.S. Open Tennis (Diligence)</td>
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<td>Apple (Excitement)—X Games 12 (Uninhibitedness)</td>
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<td>Sony (Competence)—Figure Skating (Diligence)</td>
<td>Visa (Competence)—U.S. Open Tennis (Diligence)</td>
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<td>Lexus (Sophistication)—Figure Skating (Diligence)</td>
<td>Olay (Sophistication)—U.S. Open Tennis (Diligence)</td>
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<td>Michelin (Ruggedness)—Figure Skating (Diligence)</td>
<td>Lee (Ruggedness)—U.S. Open Tennis (Diligence)</td>
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<td>Michelin (Ruggedness)—X Games 12 (Uninhibitedness)</td>
<td>Lee (Ruggedness)—Auto Racing (Uninhibitedness)</td>
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<td>Lee (Ruggedness)—NBA Playoff (Amusement)</td>
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<td>Constructs (Cronbach α)</td>
<td>Items</td>
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<tr>
<td>Personality congruency between sport and brand (α = .94)</td>
<td>The U.S. Open Tennis and Cheerios have a similar personality.<em>&lt;br&gt;The personality I associate with Cheerios are related to the personality with the U.S. Open Tennis.</em>&lt;br&gt;My personality of the U.S. Open Tennis is very different from the personality I have of Cheerios.*</td>
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<td>Prior brand attitude (α = .93)</td>
<td>Overall, my attitude toward the Cheerios is bad (1), good (7)&lt;br&gt;unfavorable (1), favorable (7)</td>
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<td>Prior sport attitude (α = .95)</td>
<td>Overall, my attitude toward the U.S. Open Tennis is bad (1), good (7)&lt;br&gt;unfavorable (1), favorable (7)</td>
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<td>Attitude toward the sport-sponsoring brand (α = .99)</td>
<td>Overall, my attitude toward the Cheerios sponsoring U.S. Open Tennis is negative (1), positive (7)&lt;br&gt;unfavorable (1), favorable (7)&lt;br&gt;bad (1), good (7)&lt;br&gt;dislikable (1), likable (7)</td>
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<tr>
<td>Purchase Intention</td>
<td>I would like to purchase the Cheerios sponsoring U.S. Open Tennis.*</td>
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<sup>a</sup> 7-point Likert Items (1 = strongly disagree, 7 = strongly agree)

<sup>a</sup> Factor significance: p < .01

<sup>b</sup> Loading was set to 1.0 to fix construct variance.
Results

Matching Brands Into Sponsoring-Event Personality Dimensions

To assess the matching effectiveness between brand and sporting event personality dimensions, a series of one-way ANOVA were performed. The independent variable was sporting event personality (five dimensions) and the dependent variables were attitudes toward the sponsoring brands representing five brand personality dimensions. For example, we compared attitude toward Hallmark (sincerity personality brand) sponsoring Figure Skating (diligence personality sporting event) vs. X Games 12 (uninhibitedness) vs. Tour de France (fit) vs. British Open Golf (tradition) vs. NCAA Football Championship (amusement). We found statistically significant differences in attitude toward the sponsoring brands among the five different sporting events for each brand personality dimension (Sincerity: $F(4,1860) = 108.73, p < .05$, Excitement: $F(4,1860) = 40.18, p < .05$, Competence: $F(4,1860) = 10.68, p < .05$, Sophistication: $F(4,1860) = 36.89, p < .05$, Ruggedness: $F(4,1860) = 50.96, p < .05$). Table 3 illustrates that the mean scores and standard deviations for attitudes toward the brands sponsoring sporting events and Table 4 shows the ANOVA results.

As shown in Table 3, the mean score of attitude toward the sponsoring brands was the highest when the brands with a “sincerity” personality (e.g., Hallmark and Cheerios) sponsor a sporting event possessing a “diligence” personality (e.g., Figure Skating and the U.S. Open Tennis; $M = 5.31$). Lower mean scores resulted when sponsoring “fit” sporting events (Tour de France and Soccer; $M = 4.62$), “tradition” sporting events (British Open Golf and Kentucky Derby; $M = 4.06$), “amusement” sporting events (NCAA Football Championship and NBA Playoff; $M = 3.37$) and “uninhibitedness” sporting events (X Games 12 and Auto Racing; $M = 3.12$). To check mean differences among five groups of sports, the post hoc multiple comparison test using the Games-Howell method was conducted, and the results indicated that the five means were different from each other with statistical significances ($p < .05$).

The mean score of attitude toward the sponsoring brands was the highest when excitement brands (Apple and Pepsi) sponsored “uninhibitedness” sporting events (X Games 12 and Auto Racing; $M = 5.16$). The mean score became lower when sponsoring “amusement” sporting events (NCAA Football Championship and NBA Playoff; $M = 4.92$), “fit” sporting events (Tour de France and Soccer; $M = 4.80$), “diligence” sporting events (Figure Skating and U.S. Open Tennis; $M = 4.25$), and “tradition” sporting events (British Open Golf and Kentucky Derby; $M = 3.88$). The results of the post hoc test indicated that there were statistically significant mean differences in attitude toward the sponsoring brands among sporting event personality dimensions ($p < .05$), except the pair of “fit” and “amusement” dimensions.

The mean score of attitude toward the sponsoring brands was the highest when “competence” brands (Sony and Visa) sponsor “amusement” sporting events (NCAA Football Championship and NBA Playoff; $M = 5.30$). The mean score fell when sponsoring “uninhibitedness” sporting events (X Games 12 and Auto Racing; $M = 4.87$), “fit” sporting events (Tour de France and Soccer; $M = 4.80$),
Table 3  Attitude Toward the Sponsoring Brand: Matching of Brand and Sporting Event Personality

<table>
<thead>
<tr>
<th>Brand Personality</th>
<th>Brands</th>
<th>Sporting Event Personality</th>
<th>Sporting Events</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sincerity</td>
<td>Hallmark/Cheerios</td>
<td>Diligence</td>
<td>Figure Skating/U.S. Open Tennis</td>
<td>5.31</td>
<td>1.29</td>
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<td></td>
<td></td>
<td>Uninhibitedness</td>
<td>X Games 12/Auto Racing</td>
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<tr>
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<td>Tour de France/Soccer</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Tradition</td>
<td>British Open Golf/Kentucky Derby</td>
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<td>1.63</td>
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<td></td>
<td>Amusement</td>
<td>NCAA Football Championship/NBA Playoff</td>
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<td>1.94</td>
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<td>Uninhibitedness</td>
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<td>Fit</td>
<td>Tour de France/Soccer</td>
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<td>1.43</td>
</tr>
<tr>
<td></td>
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<td>Tradition</td>
<td>British Open Golf/Kentucky Derby</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Amusement</td>
<td>NCAA Football Championship/NBA Playoff</td>
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<td>1.71</td>
</tr>
<tr>
<td>Fit</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tradition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amusement</td>
<td></td>
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</tr>
<tr>
<td>Excitement</td>
<td>Apple/Pepsi</td>
<td>Diligence</td>
<td>Figure Skating/U.S. Open Tennis</td>
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<td>X Games 12/Auto Racing</td>
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<td>1.43</td>
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<tr>
<td></td>
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<td>Tradition</td>
<td>British Open Golf/Kentucky Derby</td>
<td>3.88</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
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<td>Amusement</td>
<td>NCAA Football Championship/NBA Playoff</td>
<td>4.92</td>
<td>1.71</td>
</tr>
<tr>
<td>Competence</td>
<td>Sony/Visa</td>
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<td>Figure Skating/U.S. Open Tennis</td>
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</tr>
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<td>Fit</td>
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<td>1.43</td>
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<td></td>
<td></td>
<td>Tradition</td>
<td>British Open Golf/Kentucky Derby</td>
<td>4.58</td>
<td>1.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amusement</td>
<td>NCAA Football Championship/NBA Playoff</td>
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<td>Sophistication</td>
<td>Lexus/Olay</td>
<td>Diligence</td>
<td>Figure Skating/U.S. Open Tennis</td>
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<td>1.52</td>
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<tr>
<td></td>
<td></td>
<td>Uninhibitedness</td>
<td>X Games 12/Auto Racing</td>
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<td>1.65</td>
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<tr>
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<td></td>
<td>Fit</td>
<td>Tour de France/Soccer</td>
<td>4.11</td>
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<td>Tradition</td>
<td>British Open Golf/Kentucky Derby</td>
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<td></td>
<td></td>
<td>Amusement</td>
<td>NCAA Football Championship/NBA Playoff</td>
<td>3.34</td>
<td>1.73</td>
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</table>

(continued)
Table 3 (continued)

<table>
<thead>
<tr>
<th>Brand Personality</th>
<th>Brands</th>
<th>Sporting Event Personality</th>
<th>Sporting Events</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ruggedness</td>
<td>Michelin/Lee</td>
<td>Diligence</td>
<td>Figure Skating/U.S. Open Tennis</td>
<td>2.82</td>
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<td>Uninhibitedness</td>
<td>X Games 12/Auto Racing</td>
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<td>1.65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fit</td>
<td>Tour de France/Soccer</td>
<td>3.63</td>
<td>1.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tradition</td>
<td>British Open Golf/Kentucky Derby</td>
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<td>1.71</td>
</tr>
<tr>
<td></td>
<td>Amusement</td>
<td>NCAA Football Championship/NBA Playoff</td>
<td>3.50</td>
<td>1.79</td>
<td></td>
</tr>
</tbody>
</table>
“diligence” sporting events (Figure Skating and U.S. Open Tennis: \( M = 4.77 \)), and “tradition” sporting events (British Open Golf and Kentucky Derby: \( M = 4.58 \)). The results of the Games-Howell tests indicated that there were statistically significant mean differences in attitude toward the sponsoring brands among three groups (amusement > uninhibitedness = fit = diligence > traditional; \( p < .05 \)).

For sophistication brands (Lexus and Olay), the mean scores of attitude toward the sponsoring brands were similar among sponsoring “diligence” sporting events (Figure Skating and U.S. Open Tennis: \( M = 4.67 \)), “tradition” sporting events (British Open Golf and Kentucky Derby: \( M = 4.56 \)), and “uninhibitedness” sporting events (X Games 12 and Auto Racing: \( M = 4.54 \)). Sponsoring “fit” sporting events (Tour de France and Soccer: \( M = 4.11 \)) and “amusement” sporting events (NCAA Football Championship and NBA Playoff: \( M = 3.34 \)) resulted in a lower mean score. The posthoc tests indicated that there were statistically significant mean differences in attitude toward the sponsoring brands among three groups (diligence = tradition = uninhibitedness > fit > amusement; \( p < .05 \)).

Finally, for ruggedness brands (Michelin and Lee), the mean score of attitude toward the sponsoring brands was the highest when the brands sponsor “uninhibitedness” sporting events (X Games 12 and Auto Racing: \( M = 4.54 \)). “Fit” sporting events (Tour de France and Soccer: \( M = 3.63 \)), “amusement” sporting events (NCAA Football Championship and NBA Playoff: \( M = 3.50 \)), and “tradition”
sporting events (British Open Golf and Kentucky Derby: \( M = 3.43 \)) yielded a lower score. The lowest mean of sponsoring-brands attitude was found for “diligence” sporting events (Figure Skating and U.S. Open Tennis: \( M = 2.82 \)). The posthoc tests confirmed the three distinct groups (uninhibitedness > fit = amusement > tradition > diligence; \( p < .05 \)).

**Model Testing**

Before the main hypothesis testing, we validated several underlying assumptions for SEM (normality, sampling adequacy, and no extreme multicollinearity; Hair et al., 1995), and the assumptions were confirmed to be within acceptable boundaries.\(^1\) We tested four hypothetical path relationships, using structural equation analysis, by the method of maximum likelihood. AMOS 6 was used for performing data analyses. Figure 1 shows the visual description of the hypothesized structural model. Estimating goodness-of-fit for the hypothesized research model is the first step in model testing. Data analysis consisted of 9,325 cases, because each of the 373 subjects responded to 25 sponsorship stimuli. Since the number of sample cases (\( N = 9325 \)) was very large, the chi-square value, which is sensitive to a sample size, was very large (\( \chi^2 = 821.25, df = 6, p = .00 \)). The Normed Fit Index (NFI) was .85, the Comparative Fit Index (CFI) was .86, and the Root Mean Square Error of Approximation (RMSEA) was .12 respectively. Based on these measurements, we can conclude that the model is not acceptable.

To improve the model, the significance of the regression weights was first examined and one path (prior attitude toward the sporting event \( \rightarrow \) attitude toward the sponsoring brand) was not statistically significant (\( p = .33 \)). Therefore, this path was deleted from the model. In addition, modification indices were then used to identify any theoretically meaningful paths/relationships omitted in the original model. We found both personality congruence and prior brand attitude had a direct influence on purchase intention as well as indirect influence through attitude toward the sponsoring brand (\( p < .01 \)), and, therefore, the relationships were added to the revised model. The revised model with the two added paths and one deleted path was tested (Figure 2), and the revised model was found to fit the data significantly better than the original model, (\( \chi^2 = 17.67, df = 1 \)), NFI = .996, CFI = .997, and RMSEA = .042. The significance of regression weights was examined for all constructs, and all relationships were significant at \( p < .01 \). In support of H1 and H2, the personality congruence between a sporting event and a sponsoring brand leads to a favorable attitude toward the sponsoring brand (\( \beta = .25, p < .01 \)), which in turn leads to higher purchase intention (\( \beta = .58, p < .01 \)). Personality congruence also had a weak direct-influence on purchase intention (\( \beta = .08, p < .01 \)). In addition, prior brand attitude weakly leads to a favorable attitude toward the sponsoring brand (\( \beta = .05, p < .01 \)) and also had a weak direct-influence on purchase intention (\( \beta = .06, p < .01 \)). By comparing path coefficients of congruence to attitude toward the sponsoring brand (\( \beta = .25 \)) and prior brand attitude to attitude toward the sponsoring brand (\( \beta = .05 \)), we can conclude that personality congruency is a more important predictor of attitude toward the sponsoring brand than prior brand attitude. It implies that selecting a personality-matching sporting event for a sponsorship is more critical in determining attitude toward the sponsoring brand (the sponsoring brand is favored when it sponsors a personality matching
Figure 1 — Hypothesized model.
Figure 2 — Final model.

Model Fit

$X^2 = 17.67$ (df = 1)
NFI = .996
CFI = .997
RMSEA = .042
sporting event) than prior brand attitude (the sponsoring brand is favored no matter which sporting events the brand sponsors because “I like the brand anyway”) and prior sporting event attitude (the sponsoring brand is favored because “it sponsors the sporting event I like”).

**Discussion and Conclusion**

Although many companies have increasingly used sporting events as a promotional communication tool, the underlying theoretical foundations about how the match of brands and sporting events influences consumers’ reaction, and what makes sponsorship work, have seldom been the focus of detailed research. Thus, the purpose of this study was to examine from a marketing standpoint the degree to which matching the personalities of brands and sporting events would succeed in generating positive consumer responses. The results of this study suggest that respondents’ attitudes toward sponsoring brands were influenced by different pairs of brands and sporting event personality dimensions. That is, when a certain brand personality dimension was combined with a certain sporting event dimension, the sponsoring brand was favored compared with other combinations. Specifically, the pair of “sincerity” brands and “diligence” sporting events yielded the best brand-event personality fit and sponsorship effectiveness, whereas they showed rather negative attitudes when Hallmark and Cheerios sponsored the X Games and Auto Racing (“uninhibitedness” sporting event personality dimension).

It was also found that personality congruence between a sponsoring brand and a sporting event was linked to favorable attitudes toward the brand sponsoring the sporting event, which in turn, led to higher purchase intention of the sponsoring brand. In addition, through structural-relationship testing, this study confirmed that the personality congruence between a sponsoring brand and a sporting event was the most significant predictor of attitude toward the sponsoring brand.

**Implications of Study Findings**

In general, the findings of the current study provide both marketing researchers and practitioners with important implications. First, theoretically, the framework for investigating the matching effect of brand and sporting event personality established in this study provides a theoretical foundation for researchers who are interested in investigating congruence effects between sporting events and sponsors to better understand consumer processing of sponsorship stimuli (e.g., Cornwell, 1995; Ferrand & Pages, 1996; Gwinner & Eaton, 1999; Rifon, Choi, Trimble, & Li, 2004). The literature which has focused upon the congruence effect between a sponsoring brand and a sporting event has up to now yielded few or mixed empirical results. According to Lee and Cho (2007), sporting events have unique personality dimensions that evidently differentiated from brand personality. Consequently, the personality dimensions of a sporting event might work in different ways with brand personality when consumers determine if a sporting event personality and one’s perceived brand personality are congruent or matched. By using the same methodology performed in this study, researchers can accurately
and appropriately measure the degree of congruence or incongruence between a sporting event personality and a sponsoring brand personality.

Second, research in the context of marketing literature has suggested that brand personality has an impact on various key dependent variables, such as attitude, preference, usage imagery, and emotion (Biel, 1993; Fournier, 1994; Sirgy, 1982). As such, brand managers and marketers have assumed that sponsoring sporting events that are closely related to their brand image yields more desirable effects than sponsoring unrelated sporting events. However, few means have existed to measure how their customers perceive their sporting event sponsorships. This study is the first attempt to systematically and theoretically test the matching effect of brand and sporting event personality dimension on consumer attitude toward the sponsoring brand and their purchase intention. Furthermore, this research simultaneously examined the impact of the congruence between brand and sporting event personality with other important predictors, such as an individual’s prior attitude toward a brand and a sporting event, as well as the influence of sponsoring brand attitude and purchase intention. As a result, this study’s findings provide a broad understanding of the use of sporting event personality and insight into other important factors that influence consumer’s perceived congruence, attitudes, and intention.

Hence, the means of measuring the personality congruence between brands and sporting events developed in this study provides marketers with a practical tool that is conveniently applicable for measuring and monitoring the personalities of the sporting events they are sponsoring over time.

Third, this study demonstrated which sporting events brands should sponsor to elicit better consumer responses. This finding helps marketers understand which sporting event personality dimensions (e.g., sincerity) they should focus on when they plan to sponsor a sporting event (e.g., figure Skating or U.S. Open Tennis). It also helps marketers see whether their brand personality is consistent with the dominant personality dimension of the sporting event (e.g., amusement) they intend to sponsor.

**Limitations and Future Research**

One limitation of this study must be noted; i.e., convenience sampling of undergraduate college students. This sampling issue could raise concerns about projecting the study findings onto the general population. It is likely that the general population would not yield results similar to those found in this study. Therefore, it is suggested that future research studies use a probability sampling of the general population that is representative in five demographic dimensions, such as gender, age, household income, ethnicity, and geographic location, to enhance the generalizability of the results (Aaker, 1997).

It is apparent that well-controlled experimental studies are essential to better understand the antecedents and consequences of brand and sporting event personality dimensions. The antecedents might include various variables such as sports marketing messages, media coverage, liking of athletes/players, liking of professional associations, interaction between players and fans, actual playing of sports, demographics, etc. A future experimental research study can systematically manipulate these antecedent variables to see their individual and interactive effects.
on the relationship between brand and sporting event personality dimensions when evaluating sponsoring brands. Especially for unpopular brands and sporting events lacking in distinctive personality, such as a small company and WNBA, this future research can provide clues to answer the question of how to create, change, promote, and/or match brand and sporting event personality. It will also help sports marketers to develop marketing strategies to promote their sports, sports teams, and sporting events (e.g., interaction with sports fans, sponsoring of amateur games, etc.).

This study used 10 brands and 10 sporting event samples for its examination of which brands and sporting events fit together best. Therefore, it would be worthwhile to conduct future research using a more extensive list of brand and sporting event samples to see which combination of brand and sporting event personality dimensions play dominant roles in influencing consumers’ sporting event attitudes and sponsorship evaluations. In addition, the study included both specific sporting events and generic sporting types because we intended to reveal the comprehensive list of sporting events and types to identify underlying personality dimensions. However, these mixed stimuli might lack consistency because some of the sporting events are specific events (e.g., U.S. Open Tennis) while others are generic sporting types (e.g., figure skating). Therefore, it would be better to be consistent and use specific events (e.g., U.S. figure Skating Championships) instead of the sport of figure skating.

Notes

1. Skewness and Kurtosis values for each item were within the range of ±1.96, Bartlett’s test of sphericity index showed statistical significance ($p < .01$), VIFs of three predictor variables are less than 10.0, tolerance scores of the variables are larger than .10, Eigenvalues are larger than .01, and Condition Indexes are less than 100.

References


