

Spectator-Based Brand Equity in Professional Soccer

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Abstract

The purpose of this study was to assess brand equity in professional soccer teams. Through a preliminary analysis and further adaptation of the Spectator-Based Brand Equity (SBBE) scale, a refined model was tested among soccer fans. Results gathered from a confirmatory factor analysis indicated an acceptable fit of the model to the data and confirmed the relationship between Internalization, a single first-order construct, and Brand Associations, a second-order construct with ten dimensions. Review of the psychometric properties indicated all constructs had good internal consistency, convergent validity, and discriminant validity. A multi-group analysis showed the cross validity of the model, and a structural equation model revealed its predictive validity, indicating the proposed model as a valid tool for assessing brand equity in professional soccer teams. Managerial implications of these results are discussed, and some guidelines are suggested for future research.

Introduction

Strong brands are built on a foundation of trust that comes from the consumer experience (Blackett, 2009). This is especially true in professional sports such as soccer, given that the core product (e.g., games) is often intangible, unpredictable, and subjective in nature (Gladden, Milne, & Sutton, 1998). The concept of managing a team as a brand is a growing paradigm in the sports marketplace (Ross, 2006), and several European professional soccer teams provide good examples of this important strategy. From a financial perspective, a recent study conducted by Deloitte (2010) has shown the overall revenues for the top 20 clubs in Europe during the 2008/2009 season were over \$5.1 billion. Additionally, Real Madrid was the first team in any sport to obtain revenues in excess of \$521 million in a single year, while Manchester United and Barcelona have both exceeded the \$391 million during the same period. Moreover, seven of the top 10 sport brands worldwide with the most Twitter followers and Facebook fans are European soccer teams (Sports Fans

Graph, 2012), indicating the global significance of these brands.

From a consumer-based perspective, brand equity is often highlighted in the literature as a core aspect in teams' management (Gladden & Funk, 2002; Richelieu & Pons, 2009), and refers to the value consumers attach to the name and symbol of their favorite team (Gladden & Milne, 1999). However, the dimensionality of brand equity has not been unanimous, and there is some debate about the applicability of brand equity scales across different sport settings and cultures. Given these differences, sport consumer research should take into account the specific elements within each sport (Funk, Mahony, & Havitz, 2003). Furthermore, most research neglects the customers' experiences with the service in the creation of brand equity (Ross, 2006). This gap is certainly evident in professional soccer, given that the existing measurement scales are derived from models developed with physical goods in mind (e.g., Keller, 1993). Thus, the purpose of this study is to measure brand equity in

professional soccer teams, utilizing a conceptual framework that recognizes customer experience as paramount (Ross, 2006).

Brand Equity

The concept of brand equity is often used to analyze how a brand can add value to a product or service and represents the outcome of the marketing strategies adopted for a branded product compared with the strategies adopted for the same product without regard to its brand name (Aaker, 1991; Keller, 1993). Brand equity is typically classified according to two different perspectives: financial-based and consumer-based. From a financial perspective, brand equity represents the incremental cash flow resulting from a product with a brand name versus the cash flow that would result without the brand name (Shocker & Weitz, 1988). In the consumer-based perspective, brand equity represents the strengths and weaknesses of a brand, name, or symbol that add or subtract value to a product/service from the perspective of the end user (Aaker, 1996).

When viewing the construct from the consumer perspective, Aaker (1991) and Keller (1993) proposed two models for conceptualizing brand equity that have earned a great deal of attention in the general marketing literature. According to Aaker (1991), brand equity results from the combination of brand awareness (familiarity with a brand), brand associations (anything linked in the memory to a brand), perceived quality (the perception of the overall quality), brand loyalty (the brand's ability to draw and retain), and brand assets (e.g., patents, trademarks, and channel relationships). Keller (1993) introduced the concept of customer-based brand equity (CBBE), suggesting that the power of a brand lies in what resides in customer's mind. In Keller's (1993) model, brand knowledge is viewed as vital to the creation of brand equity and can be characterized in terms of awareness and image. Brand awareness relates to a consumer's ability to identify the brand under different conditions and consists of brand recognition and brand recall performance. Brand image represents the consumer perceptions about a brand and is a combination of the strength, favorability and uniqueness of the brand associations held in consumer memory. These brand associations are further categorized into attributes (product-related or non-product-related), benefits (the meaning consumers attach to the product) and attitudes (consumers' overall evaluation of the brand) (Keller, 1993).

Another important contribution in the brand equity literature was provided by Kapferer (2004), who suggested that a brand is "an attitude of non-indifference knitted into consumers' hearts" (p. 12). According to

Kapferer (2004), the power of a brand is the actual product or service, combined with all sources of cumulative brand experience, such as consumers' points of contact with the market, product price, places, or communication. However, despite brand equity's many conceptualizations and overall lack of consensus on an exact definition, there is some agreement around their meaning in terms of adding value to a brand (Ross, 2006). That is, successful brands are able to establish strong emotional and personal relationships with customers, allowing for increases in trust with purchase decisions and brand loyalty (Aaker, 1996). This is particularly relevant in professional sports, as consumers often develop a strong emotional bond to their favorite teams (Hong, Macdonald, Fujimoto, & Yoon, 2005; Mullin, Hardy, & Sutton, 2007).

Brand Equity in Sport

The literature on sport brand equity has received increasing amounts of attention by scholars in the past decade (e.g., Bauer, Stokburger-Sauer, & Exler, 2008; Gladden & Funk, 2002; Ross, 2006; Ross, Russell, & Bang, 2008). Still, most research focuses on a single dimension of brand equity and is derived from models that do not consider the distinctive nature of the services in professional sport (Ross, 2006). For example, Gladden and Funk (2002) extended Keller's (1993) work to the sport scenario and developed the Team Association Model (TAM), consisting of 16 brand associations separated into product-related attributes, non-product-related attributes, benefits, and attitudes. In turn, Bauer et al. (2008) modified the TAM and measured the uniqueness, favorability, and strength of brand associations in soccer teams. However, both conceptualizations were based on research relating to factors influencing attendance and sport consumer motives rather than associations (e.g., Branvold, Pan, & Gabert, 1997; Wann, 1995), and there is no existing research supporting the idea that these concepts are indeed specific brand associations (Ross, James, & Vargas, 2006). Based on these limitations, Ross et al. (2006) developed the Team Brand Association Scale (TBAS) using both qualitative and quantitative approaches that identified 11 sport team brand associations. Although the study by Ross et al. (2006) was important to the continued understanding of brand associations in sport, brand equity is a multidimensional concept that includes other important dimensions such as brand awareness (Aaker, 1991; Keller, 1993). Thus, further analyses focusing on brand equity's multidimensional nature are needed in order to better understand the benefits of sport brand management.

One of the first studies utilizing a multidimensional perspective of sport brand equity was developed by

Gladden et al. (1998). The authors considered Aaker's (1996) work and suggested a conceptual framework for accessing brand equity in Division I college athletics through four components: brand awareness, brand associations, perceived quality and brand loyalty. The research also defined three groups of antecedents of brand equity (team-related, organization-related, market-related) and three consequences in the marketplace (national media exposure, corporate sponsorship, merchandise sales). Similarly, Gladden and Milne (1999) focused on the expansion of this brand equity model to the professional sport setting. The authors suggested that, with the addition of two additional antecedents (logo design and stadium), the model developed by Gladden et al. (1998) could be expanded to the context of professional sports. More recently, Kerr and Gladden (2008) modified and extended these conceptualizations to the global marketplace to explain the impact of professional sport teams in foreign markets. Despite the contribution of all these studies, remaining limitations suggest the need for further study of brand equity in sports. Specifically, these conceptual frameworks are based on models derived from a manufactured goods perspective (Aaker, 1996) and do not address the importance of consumer actual experience, which is pivotal due to the experiential nature of spectator sports (Ross et al., 2008).

Bauer, Sauer, and Schmitt (2005) proposed the Brand Equity in Team Sport (BETS) scale based on Keller's (1993) work, which operationalizes brand equity using fourteen indicators distributed by brand awareness, product-related attributes, non-product-related attributes, and brand benefits. This study highlighted the importance of brand awareness and demonstrated that brand equity had a significant effect on economic success of the organization. However, the fact that the BETS was derived from a perspective that does not consider consumer experience with the brand can be a significant limitation to the understanding of brand equity in sports.

Given the many limitations of the research pertaining to sport brands, Ross (2006) developed the Spectator-Based Brand Equity (SBBE) model. This conceptual framework was developed by taking into account the customers' experience with the sports services and suggests organization-induced (marketing-mix strategies), market-induced (word-of-mouth communication, publicity), and experience-induced (actual consumer experience) as antecedents of brand equity. In this model, brand equity is conceptualized through brand awareness and brand associations, and the combined result of these variables leads to a set of consequences in the marketplace (team loyalty, media exposure, merchandise sales, ticket sales, and revenue solicitation). The SBBE

model was then empirically tested by Ross et al. (2008) and found to be a reliable tool to measure brand equity in sports. However, the authors suggest future research in different contexts, and to explore further contributors to brand equity, in order to further establish the validity of the model. Additionally, the authors did not examine the predictive efficacy of SBBE scale on desired outcome variables, and previous literature suggests the perception about the team brand influences consumer satisfaction (Beccarini & Ferrand, 2006) and future behaviors (Bauer et al., 2008; Ross, 2006). Furthermore, the SBBE model was never empirically examined outside the context of North American professional sport. The specific features of each sport and the distinct cultural elements were not considered in the study by Ross et al. (2008), and should be considered when evaluating brand equity (Yoo & Donthu, 2002).

Purpose

Despite the contribution of previous literature (e.g., Bauer et al., 2005; Gladden & Milne, 1999), most research fails to incorporate consumer experience and does not consider varying cultural differences among professional sports. The consumer experience should be a focal point in the conceptualization of sport brand equity, given that sporting events are unique and can evoke a wide range of emotional responses (Madrigal, 2003). To that extent, the current research incorporates consumer perceptions by using the SBBE model, as well as refining its domains after an initial examination of the scale among actual spectators attending a European soccer match. The purpose of this study is to examine and adapt the SBBE model in order to measure brand equity in the European professional soccer context. In doing so, this study seeks to validate a scale and contribute to a deeper understanding of the benefits of brand equity in professional sport. Given that sport fans are often emotionally involved when attending the events (Biscaia, Correia, Rosado, Maroco, & Ross, 2012; Madrigal, 2003), conducting research in this particular environment will provide important cues for professional sport across a wide variety of settings. That is, European soccer teams attract millions of passionate supporters to stadiums worldwide on a regular basis, and fans are known to be some of the most passionate and emotionally invested in the world (Vallerand et al., 2008).

Method

This research was completed through a four-step, multi-stage procedure. First, a preliminary analysis of the SBBE was conducted to test its appropriateness on a sample of soccer spectators. Second, the scale was

Table 1
Spectator-Based Brand Equity (SBBE) scale proposed by Ross et al. (2008).

Construct	Items
Brand Mark	Item 1: The team has distinctive colors Item 2: The symbol of the team is unique Item 3: The team's logo is different from others
Rivalry	Item 1: The team has a tough conference Item 2: The team is in an easy division (reverse scored) Item 3: The team often beats their biggest opponents Item 4: The team does well against their major rivals
Concessions	Item 1: The concessions at the arena are excellent Item 2: There are specific foods at the arena that I like to eat Item 3: I enjoy eating at the arena Item 4: The concessions at the arena are not acceptable (reverse scored)
Social Interaction	Item 1: The team offers me a place to spend time with friends Item 2: Being a fan of the team is a good way to meet other people Item 3: I am able to see friends because of the team Item 4: The team provides a good place to see friends
Commitment	Item 1: The team has many loyal fans supporting them Item 2: Many fans regularly follow the team Item 3: The loyalty of the fans is very noticeably Item 4: Fans have followed the team for a long time
Team History	Item 1: The team has history of winning Item 2: The team has a rich history Item 3: The team has been successful in the past Item 4: There is no history behind the team (reversed scored)
Organizational Attributes	Item 1: The team is committed to its fans Item 2: The team is very loyal to its fans Item 3: The devotion to fans by the team is obvious Item 4: The team gives back to the community
Team Success	Item 1: The team is not very successful (reverse scored) Item 2: The team is a great team Item 3: The team is not very high quality (reverse scored) Item 4: The team has high quality players Item 5: The performance of the team is first-class
Team Play	Item 1: The team has a clear personality (e.g., dedicated, hard work) Item 2: The team has distinct qualities (i.e., intensity, commitment) Item 3: The team has unique characteristics (i.e., trusted, responsive)
Non-player personnel	Item 1: The team's personnel do a fantastic job Item 2: The team has excellent coaches Item 3: The management of the team is outstanding
Stadium	Item 1: The arena has unique characteristics Item 2: The design of the arena is excellent Item 3: The arena enhances the enjoyment of going to see the game
Identification	Item 1: The <team name> are my team Item 2: I consider myself a loyal fan of the <team name> Item 3: Supporting the <team name> is very important to me Item 4: I want others to know that I am a fan of the <team name>
Internalization	Item 1: I feel like I am a member of the <team name> Item 2: Being a fan of the <team name> is a large part of who I am Item 3: I "live and breathe" the <team name> Item 4: I like to think that I "bleed the colors" of the <team name>

refined to capture the specified domain and content validity was assessed through a quantitative approach and expert review. Third, a pre-test was conducted to assess item sensitivity and construct reliability, while the final step evaluated the proposed model using confirmatory factor analysis (CFA), multi-group CFA, and structural equation modeling.

Step 1: Preliminary Analysis of SBBE

Eight trained surveyors administered a questionnaire to spectators during a game of the top Portuguese soccer league. A total of 629 surveys were distributed, of which 585 were completed and deemed usable after data screening for an effective response rate of 93%. Most of the respondents were males (76.9%) and ranged from 18 to 77 years of age, with the majority in the 20-29 age range (29.2%). More than half of the respondents (53.9%) were affiliated members of the team, and approximately one-third were season ticket holders (31.2%). Approximately half of the respondents indicated going to the stadium in the company of two or three other persons (52.0%). The questionnaire included demographic questions and the 49-item SBBE (Ross et al., 2008) scale composed of brand awareness and brand associations. Brand awareness is represented by identification and internalization and assessed through eight items. Brand associations are assessed by 41 items representing brand mark, rivalry, concessions, social interaction, commitment, team history, organizational attributes, team success, team play, non-player personnel, and stadium community. All items were measured on a 7-point Likert-type scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (7) (Table 1). The scale was translated to Portuguese and then back-translated to English to minimize discrepancies between the original scale and the necessary, translated version (Banville, Desrosiers, & Genet-Volet, 2000).

The scale data was then submitted to a CFA using AMOS 19.0 (SPSS Inc, Chicago, IL). A good fit of the model was assumed when χ^2 (chi-square) was not statistically significant ($p > .05$), and the TLI (Tucker-Lewis Index), CFI (comparative-of-fit-index) and GFI (goodness-of-fit index) were larger than .90 (Hair, Black, Babin, Anderson, & Tatham, 2005). A RMSEA (root mean square error of approximation) value less than .06 was indicative of good fit while an acceptable fit was assumed for a minimum cut-off of .08 (Byrne, 2000). Internal consistency was estimated through composite reliability, and values above .70 were considered indicative of good internal consistency (Hair et al., 2005). Convergent validity was evaluated through the average variance extracted (AVE), and values greater than .50 were considered indicative of good

convergent validity (Fornell & Larcker, 1981; Hair et al., 2005). Finally, discriminant validity was accepted when the AVE for each construct was greater than the squared multiple correlations between that construct and any other (Fornell & Larcker, 1981).

Step 2: Refinement of the Scale

Two of the researchers reviewed and edited the SBBE items after the preliminary analysis. The content validity was first assessed through Lawshe's (1975) method. The list of the items was supplied to a panel of eight sport management lecturers from a mid-sized Portuguese University. Each panelist was asked to classify whether the items were *essential*, *useful but not essential*, or *not necessary*. Then, the content validity ratio (CVR) and content validity index (CVI) were calculated based on the number of items considered as essential by the panelists (Lawshe, 1975). The CVR value is computed for each item in order to reject or retain the items, while the CVI is the mean of all CVR values representing the overlap between the items and its theoretical domain. The use of this method does not preclude other procedures (Lawshe, 1975), and as such, a second assessment of the content validity was carried out. Three additional sport marketing researchers from two different universities were selected to provide further feedback about the items generated by the researchers. Each expert received an e-mail containing the purpose of this study, an explanation of the procedures, a detailed description of the constructs, and the list of items proposed.

Step 3: Pre-test

An online pre-test with the refined scale was conducted on the Portuguese sports website with the most visitors (A Bola, 2010). A banner was activated on the website during one day indicating the purpose of the research and asking visitors to access the link and complete a questionnaire. When accessing the link, visitors were asked to name their favorite team and to respond to the items concerning that team. To ensure that each visitor answered only once, the IP address was recorded in the database, and further access from these addresses was denied after the questionnaire submission. A total of 734 surveys were collected, and responses from those individuals less than 18-years old that were not fully completed or that contained 10 or more consecutive answers on the same scale number were excluded, leaving 562 usable surveys (76.6% effective response rate). To evaluate if the items were close enough to the normal distribution and could be used in further factorial analysis, skewness and kurtosis values were examined. This assumption was accepted for absolute values of skewness and kurtosis less than 3

and 10, respectively (Kline, 1998). Item-to-total correlations were employed to examine the sub-scale structure of each construct and the internal consistency of constructs was assumed when composite reliability was greater than .70 (Hair et al., 2005).

Step 4: Assessment of Spectator-Based Brand Equity model

The banner used in the pre-test was again activated on the website, but this time included the final version of the scale and demographic items. The questionnaire also included measures of consumer satisfaction and behavioral intentions in order to examine the predictive validity of the proposed scale. The construct of consumer satisfaction included three items (satisfaction with team games; expectation fulfillment regarding team games; comparison of team games with ideal games), and each of those items was measured on a 7-point Likert-type scale, anchored by *Not Satisfied at All* (1) and *Extremely Satisfied* (7). Additionally, three items to assess behavioral intentions of future game attendance, recommending game to others, and team-related purchases were included and scored on a 7-point Likert-type scale ranging from *Not Likely at All* (1) to *Extremely Likely* (7). Both the satisfaction and behavioral intention scales were adapted from Vilares and Coelho (2005). The questionnaire was on-line for two days and a total of 2219 visitors responded. After data screening, 1390 complete responses were deemed usable for data analysis (62.6% effective response rate). It is important to note that on-line questionnaires have the advantage of collecting large samples within a short time, but may have the disadvantage of limiting the sample representativeness. All respondents were fans of one of the 16 teams from the top Portuguese soccer league. The sample was composed almost exclusively of males (97.8%) and ages ranged from 18 to 75 years, predominantly in the 20-29 age bracket (39.6%). About one-third of the participants were affiliated members of their favorite team (39.5%), and the majority were not season ticket holders (81.4%). Approximately half of the participants reported going to the stadium in the company of two or three other persons (50.6%).

A CFA was then performed to confirm the proposed structure of the refined model as described in Step 1. Additionally, a multi-group CFA was conducted to compare the collected sample with a validation sample in order to assess cross validity. The model's invariance in both samples was tested by comparing the unconstrained model with constrained models (factor loadings fixed and variances/co-variances fixed). Factorial invariance was accepted when the models did not differ significantly ($p > .05$), according to the χ^2 statistic

(Loehlin, 2003). Finally, a structural model using Maximum Likelihood estimation was performed to assess the predictive validity of the proposed scale on two spectators' outcomes: satisfaction and behavioral intentions.

Results

Step 1: Preliminary Analysis of SBBE

The goodness-of-fit indices produced through the CFA indicated that the SBBE model showed a poor fit to the data [$\chi^2(580)=1637.10$ ($p < .001$), TLI=.86, CFI=.87, GFI=.86, RMSEA=.06]. Although the RMSEA value was indicative of good fit, the χ^2 statistic was significant and the TLI, CFI and GFI values were below the threshold of .90 (Hair et al., 2005). Also, the constructs in the model did not show good psychometric properties, supporting the need of the scale's refinement. Composite reliability values for Brand Mark (.58), Rivalry (.68), Commitment (.66), Team History (.66), Team Play (.69), and Stadium Community (.48) indicated lack of internal consistency. Convergent validity was only accepted for Identification (AVE=.55) and Internalization (AVE=.65). Moreover, with exception to Brand Mark, Concessions, and Social Interaction, all constructs showed a lack of discriminant validity.

Step 2: Refinement of the Scale

Based on the data from the preliminary analysis of the SBBE scale on soccer spectators, the review of the items resulted in the rewording of 13 items, the removal of nine items, and the addition of six items. Additionally, Rivalry was removed due to the lack of individual reliability of the subscale items, and lack of cultural importance in this particular study setting. More specifically, within the context of European soccer there is a large gap between those teams that can vie for championships and trophies every year, whereas in the United States there is a model of closed membership stipulating the number of teams, salary caps, and a lack of a relegation system. This leads to a situation where only a few financially strong European clubs can compete on a regular basis for winning the leagues, and may be one reason respondents did not see the Rivalry component as important. For example, in 17 of the past 20 seasons Real Madrid and Barcelona have shared the Spanish league championship, providing evidence of the disparity in team success. Also, Non-player Personnel was separated into the distinct factors of Management and Head Coach as proposed in literature (Bauer et al., 2008; Gladden & Funk, 2002), while team success and team play were grouped into one factor (labeled team success), given the strong relation between the items in both constructs. For the

Table 2
Factor Loadings, Z-values, Composite Reliability, and Average Variance Extracted (AVE) for the first-order constructs.

Item	Factor Loading	Z-value	Composite Reliability	AVE
Brand Mark (BM)			.81	.60
Item 1: I like my team's logo	.798	33.53		
Item 2: My team's uniforms are attractive	.567	21.83		
Item 3: My team's logo has character	.919	40.65		
Concessions (CON)			.86	.68
Item 1: There are specific foods at the arena that I like to eat	.719	29.48		
Item 2: I enjoy eating at the arena	.830	35.64		
Item 3: Eating and drinking at the arena is something I like to do	.910	40.51		
Social Interaction (SI)			.82	.60
Item 1: Being a fan of the team is a good way to meet other people	.702	27.99		
Item 2: I am able to see friends because of the team	.755	30.79		
Item 3: The team provides a good place to see friends	.863	36.87		
Commitment (COM)			.81	.59
Item 1: Many fans regularly follow the team	.736	30.22		
Item 2: The loyalty of the fans is very noticeable	.752	31.10		
Item 3: Fans have followed the team for a long time	.808	34.37		
Team History (TH)			.90	.75
Item 1: The team has a history of winning	.846	37.89		
Item 2: The team has a rich history	.862	38.99		
Item 3: There is a successful history behind the team	.885	40.65		
Organizational Attributes (ORG)			.80	.72
Item 1: The team is very loyal to its fans	.850	38.48		
Item 2: The devotions to fans by the team is obvious	.807	35.54		
Item 3: The team is heartfelt to its fans	.881	40.74		
Team Success (SUC)			.91	.76
Item 1: The team has high quality players	.879	40.95		
Item 2: The team is a great team	.871	40.37		
Item 3: The team has a good performance in competitions	.867	40.03		
Head Coach (HC)			.97	.90
Item 1: The team's head coach does a fantastic job	.935	46.18		
Item 2: The team has an excellent head coach	.970	49.38		
Item 3: I like the head coach of my team	.946	47.14		
Management (MGT)			.94	.83
Item 1: The management of the club is outstanding	.907	43.43		
Item 2: I like the managers of my club	.915	44.05		
Item 3: The managers of my club strive to improve the team	.909	43.56		
Stadium (STD)			.87	.70
Item 1: My team's arena has "personality"	.835	36.62		
Item 2: The architecture of my team's arena is attractive	.833	36.51		
Item 3: The arena enhances the enjoyment of going to see the team	.833	36.51		
Internalization (INT)			.92	.80
Item 1: Being a fan of my favorite team is a large part of who I am	.895	36.62		
Item 2: I "live and breathe" my favorite team	.909	41.09		
Item 3: I like to think that I "bleed the colors" of my favorite team	.886	42.01		

Table 3
Discriminant validity results for the first-order constructs.

	AVE	BM	CNC	SOC	COM	TH	ORG	SUC	HC	MGT	STD	INT
		.60	.68	.60	.59	.75	.72	.76	.90	.83	.70	.80
BM	.60	1.00										
CNC	.68	.07	1.00									
SOC	.60	.20	.19	1.00								
COM	.59	.39	.14	.30	1.00							
TH	.75	.23	.06	.10	.51	1.00						
ORG	.72	.30	.18	.32	.52	.26	1.00					
SUC	.76	.27	.12	.29	.51	.38	.65	1.00				
HC	.90	.13	.06	.16	.29	.21	.44	.64	1.00			
MGT	.83	.13	.07	.17	.28	.17	.61	.65	.60	1.00		
STD	.70	.31	.13	.19	.41	.31	.38	.43	.29	.25	1.00	
INT	.80	.26	.11	.34	.24	.08	.26	.15	.07	.07	.16	1.00

Note. BM=Brand Mark; CNC=Concessions; SOC=Social Interaction; COM=Commitment; TH=Team History; ORG=Organizational Attributes; SUC=Team Success; HC=Head Coach; MGT=Management; STD=Stadium; INT=Internalization.

same reason, the Identification and Internalization items were grouped into a single dimension. It was considered conceptually more appropriate to name this dimension Internalization, rather than Brand Awareness, given that all selected items in this construct were related to how spectators incorporate the team into their personal identity (James & Ross, 2002). The proposed measurement model included 46 items (three items less than the original SBBE scale shown in Table 1), consisting of a single construct with six items to assess Internalization, and 10 constructs (four items each) to assess brand associations: Brand Mark, Concessions, Social Interaction, Commitment, Team History, Organizational Attributes, Team Success, Head Coach, Management, and Stadium.

Lawshe's (1975) method showed the relevance of most items and results of the content validity ratio showed 33 items were above the .75 value required to satisfy the 5% level, while the content validity index for the total of the items was .71. In addition, the second expert panel provided suggestions for maintaining the conceptual definitions of the constructs and to change the wording in five of the items displaying poor psychometric properties. Given these results, the suggestions were accepted and revisions were made.

Step 3: Pre-test

The skewness values ranged from -2.94 to -0.01 while the kurtosis values ranged from -0.14 to 9.78. According to Kline (1998), these values do not represent non-normality problems that may limit further use in factor analysis. The analysis of item-to-total cor-

relation revealed a stable sub-scale structure for each construct, and the three items loading the highest for each construct were selected to ensure reliability and parsimony of the model (Biscaia et al., 2012; Gladden & Funk, 2002). Composite reliability of the constructs ranged from .80 to .97, and based upon these results, scale items were deemed reliable for the intended population. The final model contained a total of 33 items (three items for Internalization and 30 items for Brand Associations) (Table 2).

Step 4: Assessment of Spectator-Based Brand Equity model

Measurement Model. The model showed an acceptable fit to the data [$\chi^2(484)=3431.78$ ($p<.001$), TLI=.92, CFI=.92, GFI=.84, RMSEA=.07]. The χ^2 value was statistically significant and higher than in Step 1. However, the assessment of the model in Step 4 was conducted with a larger sample and the χ^2 statistic is sensitive to the sample size (Hair et al., 2005). The GFI was indicative of poor fit, however TLI, CFI and RMSEA values met the minimum recommended criteria for an acceptable fit (Byrne, 2000, Hair et al., 2005). Furthermore, Bollen (1989) suggests that despite the cut-off points, it is important to compare the fit of the model with the fit of prior research models, and the fit indices produced are comparable to the previously established SBBE fit indices (Ross et al., 2008). Additionally, all items showed high factor loadings ranging .567 to .970, and the z-values ranged from 21.83 to 49.38 (Table 2). These results indicate each item did load significantly on its factor. All the con-

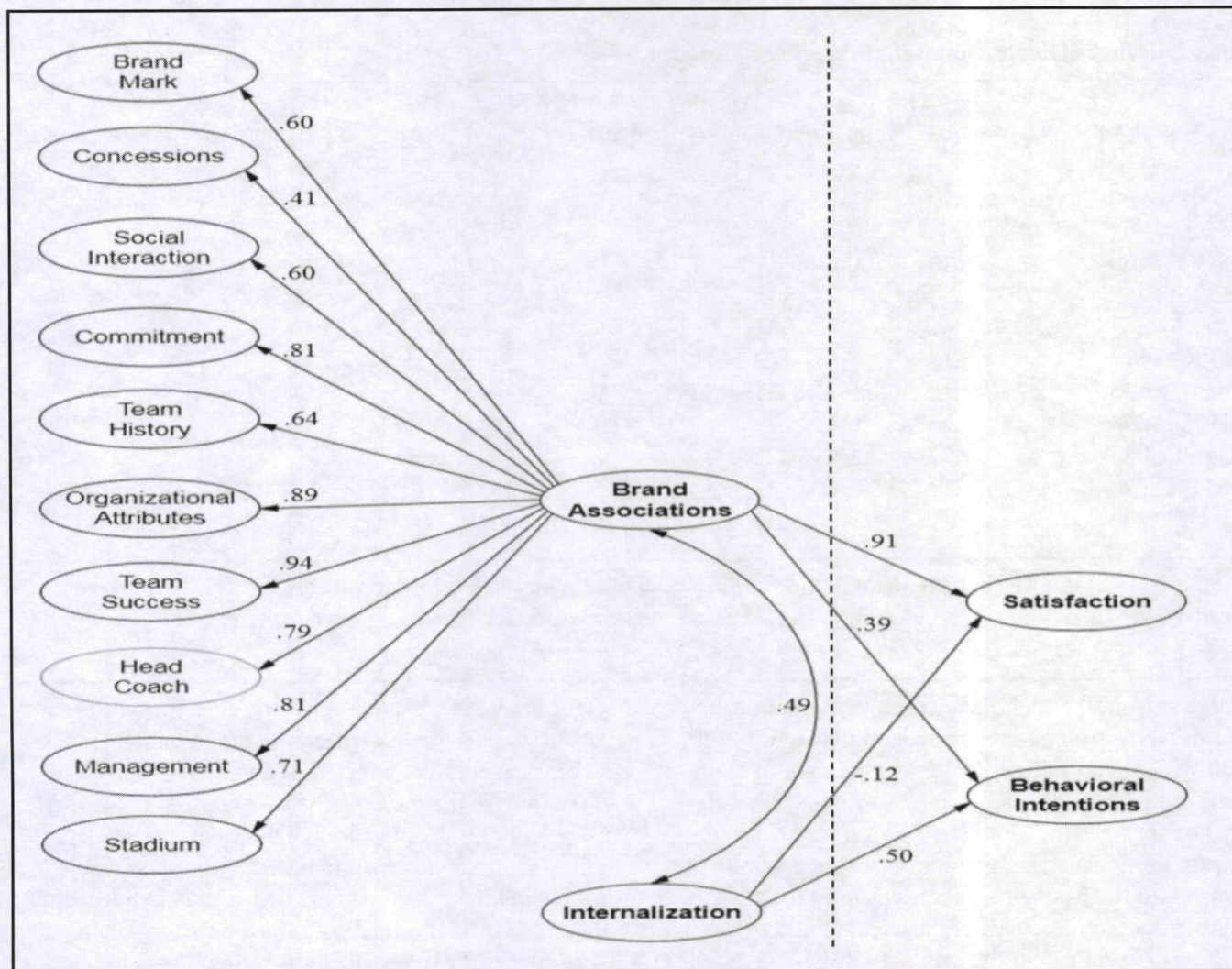


Figure 1. Proposed model for assessing brand equity in professional soccer.

structs showed good levels of internal consistency, ranging .81 to .97. The AVE values ranged from .59 to .90, with a mean of .72, providing evidence for convergent validity.

The AVE and squared-correlation tests of discriminant validity are reported in Table 3. The squared correlation values ranged from .06 to .65, indicating discriminant validity in all the first-order constructs. Regarding the second-order construct, the paths between brand associations and their proposed dimensions are shown in Figure 1. Inspection of these standardized coefficients indicates that team success (.94) was the strongest predictor of brand associations, followed by organizational attributes (.89). Conversely, the weakest predictors were brand mark (.60), social interaction (.60), and concessions (.41). All relationships were significant at $p < .001$, and internal consistency (.92) and convergent validity (AVE=.54) was accepted for Brand Associations. Figure 1 also shows the strong correlation between brand association and Internalization (.49).

Cross Validity. A multi-group CFA was conducted with the testing sample ($n=1390$) and a validation sample ($n=897$) collected one week after first data set through the same procedure described in the step 4 of the method section. All teams were represented in the validation sample and respondents had similar characteristics: 96.9% were male, 42.5% were in the 20-29 age range, 37.8% were affiliated members of their favorite team, 80.3% were not season ticket holders, and 47.3% regularly attend games in the company of two or three other persons. The fit of the unconstrained model [Model 1: $\chi^2(968)=6073.91$ ($p < .001$), TLI=.91, CFI=.91, GFI=.84, RMSEA=.05] was acceptable, as well as for the models with constrained factor loadings [Model 2: $\chi^2(991)=6098.14$ ($p < .001$), TLI=.91, CFI=.91, GFI=.84, RMSEA=.05] and constrained variances/co-variances [Model 3: $\chi^2(1001)=6108.02$ ($p < .001$), TLI=.91, CFI=.91, GFI=.84, RMSEA=.05]. The χ^2 statistic did not show significant differences between Model 1 and Model 2 ($\chi^2 dif(23)=24.23$; $p=.39$) or Model 1 and Model 3 ($\chi^2 dif(33)=34.11$;

$p=.41$). Thus, the results demonstrated the model's invariance in both samples indicating that the factorial structure of the proposed model was stable in two independent samples (Loehlin, 2003; Maroco, 2010).

Predictive Validity. Sport marketing research contends that the spectator's perception about a team brand influences post-purchase reactions (Bauer et al., 2005). As such, a structural equation model was examined to test the extent to which Internalization and Brand Associations could predict Satisfaction and Behavioral Intentions. After confirming that there were no duplicate respondents based on IP address, the testing and validation samples were merged ($n=2287$) given the model's invariance. The goodness-of-fit indices computed to assess the measurement model [$\chi^2(686)=6310.97$ ($p<.001$), TLI=.91, CFI=.92, GFI=.85, RMSEA=.06.] and the structural model [$\chi^2(687)=6345.32$ ($p<.001$), TLI=.91, CFI=.92, GFI=.85, RMSEA=.06.] indicated an acceptable fit to the data. The χ^2 statistic was significant and the GFI was below the .90 threshold, however, TLI, CFI and RMSEA values met the recommended criteria for an acceptable fit (Byrne, 2000; Hair et al., 2005). Composite reliability values for satisfaction (.93) and behavioral intentions (.82) indicated good internal consistency, and convergent validity was accepted with AVE=.82 and AVE=.61, respectively. The AVE for both constructs was greater than the square correlation between them (.28), indicating discriminant validity (Fornell & Larcker, 1981). Inspection of the path coefficients reveals that Brand Associations ($\beta=.91$, $p<.001$) and Internalization ($\beta=-.12$, $p<.001$) were significant predictors of Satisfaction (Figure 1). These variables accounted for 74% of the variance on Satisfaction. The predictive effect of Brand Associations ($\beta=.39$, $p<.001$) and Internalization ($\beta=.50$, $p<.001$) were also statistically significant on Behavioral Intentions, accounting for 59% of the variance.

Discussion

The main goal of this study was to measure brand equity within a professional soccer context. This study makes a significant contribution to the literature by recognizing consumer experience and cultural differences across sport settings in the assessment of sport brand equity. The differences observed between the original SBBE model used in Step 1 and the final model reinforce the idea that brand equity is environmentally sensitive (Yoo & Donthu, 2002). For example, the respondents were able to distinguish between different non-player personnel. This is consistent with previous research (Gladden & Funk, 2002) and may be related to the success of some Portuguese head coaches in the international soccer landscape, such as José

Mourinho (award for best coach in 2010 by FIFA). Similarly, important figures in Portuguese clubs like Pinto da Costa (FC Porto president since 1982), who has won a total of 52 trophies, of which seven were international competitions, since the beginning of his management career (Record, 2011) likely contribute to the recognition of non-player personnel. The association of specific head coaches or managers with the soccer teams is frequent in European clubs. For example, Alex Ferguson has managed the Manchester United club since 1986 and is an integral figure of the club's history of success (Premier League, 2011).

Additionally, the absence of the rivalry component in the final model was based on participants' responses of the preliminary analysis, and it is similar to previous research on brand associations using a sample of soccer consumers (Bauer et al, 2005; Bauer et al., 2008). However, this does not mean that the rivalry component should be neglected in future research on sport brands, given that anecdotal evidence suggests that the competition between teams and athletes known to be historical competitors may play an important role in some sporting contexts. For example, the historic matches between Rafael Nadal and Roger Federer attract millions of tennis fans based on the competitive rivalry of the athletes.

This study also provides a number of important managerial implications to aid in the leveraging of team brands. The factor analysis using the final model showed an acceptable fit of the data to the model and confirmed the proposed structure for measuring brand equity using internalization, a single first-order construct, and brand associations, a second-order construct. Both first-order and second-order constructs showed composite reliability, convergent validity and discriminant validity. All dimensions of brand associations showed statistically significant relationship with this second-order construct, with the strongest predictor being team success (.94) supporting prior research on sports brand equity (Gladden et al., 1998; Ross et al., 2008). This highlights the quality of the players and team's performance on the field as important components in the creation of a positive brand image. A strict policy on hiring players and the development of a strong network of scouts may be crucial to properly manage the team brand. The club's decisions on hiring non-player personnel with influence on team's performance are also important indicators to enhance fans' trust in the team, given the predictive strength of the management (.81) and head coach (.74) dimensions. For example, the hiring of qualified trainers and positional coaches might help to enhance the management of brand associations in a positive manner. The constructs mentioned above emphasize the contribu-

tion of the product-related attributes to team brand management. Still, the on-field performance always has a certain degree of unpredictability, and other categories of brand associations should be considered when managing the team's brand in order to develop a differentiating brand strategy.

The strong predictive effect of organizational attributes (.89) and commitment (.81) emphasizes the importance of the non-product-related attributes in sport organizations. Sport brands with clear values that govern employees' conduct are perceived positively by fans (Bauer et al., 2008). Thus, implementing an annual fan satisfaction survey may prove to be crucial in designing marketing programs that strengthen fans' connection with the team and positively influence their perception about the organizational attributes. Knowing the fans' opinion about the overall performance of the club is also important to build a solid base of consumers and increase the sense of brand community (McAlexander, Schouten, & Koenig, 2002). This may contribute to the attraction of new consumers and maximization of the economic profits for the team (Richelieu & Pons, 2009). Similarly, the predictive effects of Stadium (.72), team history (.64) and brand mark (.60) can provide useful insights for managing sport brands without being dependent on the seasonal ups and downs of team performance. The stadium is a visible representation of the team brand (Underwood, Bond, & Baer, 2001) and the atmosphere during the games contributes to satisfying the hedonistic consumption needs of the spectators (Uhrich & Koenigstorfer, 2009). Clubs may positively influence fans' behavior by emphasizing the aesthetic characteristics of the stadium (Kerr & Gladden, 2008) as well as evoking past memories of the consumption experience when promoting the games. As suggested by Boyle and Magnusson (2007), cultivating a team's tradition is important to enhance the sport's brand. This could be achieved, for example through a club museum (Bauer et al., 2008) with affordable prices, historical records of team performance on the official website, videos about important players and teams in the past, or guided tours of the stadium.

Contrary to prior research (Ross et al., 2008), social interaction (.60) and concessions (.41) were significant predictors of brand associations suggesting that the experiential benefits are important aspects of spectators' consumption experience (Bauer et al., 2008). Sharing the sport experience with other fans is yet another way contributing to leveraging the sports team's brand (Underwood et al., 2001). Thus, it could be suggested that by improving the quality of concession areas (e.g., partnerships with food companies that fans appreciate), the teams will boost opportunities for

fans to socialize and consequently increase their levels of identification (Ross, Walsh, & Maxwell, 2009). Previous research has suggested identification and internalization as important components of the multi-dimensional construct of brand equity (Ross et al., 2008). In the current study, the scale-refinement procedures led us to consider only the Internalization component in the model, which was highly correlated with brand associations (.49). Ross et al. (2008) suggests an individual's psychological connection with a team serves as a gauge to his/her awareness of the sport brand, while Keller (2008) refer that brand awareness plays an important role in consumer decision making. Considering that European soccer teams enjoy extensive media exposure and global popularity (Bauer et al., 2008), brand awareness in European soccer teams may serve as constant, whereas brand associations are directly linked to an individual's internalization with a team, which was shown to be an important aspect for measuring sport brand equity.

There are two other important findings in this study highlighting its contribution to the sport brand literature. First, the model's invariance in two independent samples was supported, indicating cross validity. Second, the predictive efficacy of the model was also supported by the statistically significant amount of variance explained on spectators' satisfaction and behavioral intentions. These are crucial steps when evaluating psychometric scales and support the conclusion that the proposed model is a valid and reliable instrument to measure brand equity in professional soccer teams. As such, findings from this study provide sport managers with a detailed framework to assist them in making strategic marketing decisions. High levels of internalization and an appropriate management of brand association dimensions will allow managers to strengthen the team's brand, increase consumer behavior, and reduce vulnerability to competitors in leisure marketplace (Mullin et al., 2007). Moreover, previous literature suggests that the image of a sporting event can be transferred to sponsoring brands (Gwinner & Eaton, 1999). Therefore, building brand equity might also be crucial to attracting sponsors (Ross, 2006) and will help to ensure long-term success for sport organizations.

Limitations and Future Research

As with any study, this research exhibits limitations worth considering and provides some direction for future research. First, data were collected through an on-line survey, which may have influenced sample composition. For example, few participants were female, and the literature suggests that spectators' perceptions about the sporting events tend to vary accord-

ing to gender (Trail, Fink, & Anderson, 2002). Collecting additional data at the actual stadium may contribute to a more representative sample of the club's fan base. Also, the comparison between the internet data collection and traditional paper-and-pencil format would be an interesting issue in research related to sport consumers. Internet data collections are increasing in popularity due to cost efficiencies and logistical concerns, and future research might address some differences in these methodologies. Second, few participants in this study were season ticket holders and this may have influenced the results of the model. Additional studies should collect larger samples of fans with high levels of psychological and financial investment in order to compare brand equity in different groups of consumers. Third, despite the predictive efficacy of the model on satisfaction and behavioral intentions, future research could investigate other potential consequences of sport brand equity. For example, the relationship between brand equity and the attitude toward the sponsoring brands, or with teams' revenues, may be interesting topics to examine in future research. Fourth, the continued globalization of soccer around the world emphasizes the need for cross-cultural research to evaluate the fit of the proposed model in different cultures. Fifth, the inclusion of direct measures of brand awareness in the proposed model may be crucial to extend our knowledge of sport brand equity. Future research could use recall and recognition measures, alongside internalization and explore the relationship between these dimensions.

Finally, although the model showed predictive validity, a considerable amount of the variance of satisfaction and behavioral intentions remains unexplained. Thus, future research could include other concepts proposed in the literature to extend the understanding of sport brand equity. For example, the re-inclusion of the rivalry component may be interesting to capture the competitive nature of sport, and thereby contributing to generalize findings in different sport scenarios. Also, the inclusion of additional factors such as nostalgia (Gladden & Funk, 2002), star players, league quality, sponsor alignment, geographic location, or existing brand community (Kerr & Gladden, 2008) may be interesting topics for discussion on sport brand associations among multiple professional sports in the global marketplace.

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