Consumer Orientation Toward Sporting Events

Scale Development and Validation

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Sporting events offer a strong emotional value to consumers and therefore occupy a prominent role in their life. In addition, they represent an important market potential for sponsors with an economic value in excess of \$200 billion a year. A growing concern shared by researchers and sports marketers is to understand the various motivations that bring individuals to consume sporting events and related goods and services. The present research offers a definition of the concept of orientation toward a sporting event (OSE), develops a reliable instrument that captures its various facets, carefully validates the OSE scale in different contexts, and, finally, illustrates how this instrument may be used as a valuable segmentation tool.

Keywords: orientation; motivation; sporting events; construct validation; segmentation

Sport plays an increasingly important role in modern societies, as its influence spans across many spheres of activities. From an economic perspective, sport accounts for a significant part of the entertainment and service industries (King 2004; Mullin, Hardy, and Sutton 2000). In the

United States, for example, the long-time neglected soccer now counts more than 16 million players registered in organized clubs. They join more than 45 million players in South America, 90 million in Africa, 120 million in Asia, and 30 million in Europe who also participate in organized soccer (Football International Federation Association [FIFA], www.fifa.com). Such participation levels boost not only the consumption of soccer-related goods but also the demand for diverse services, ranging from TV coverage and pay-per-view to sporting events organizations and retail outlets (King 2004).

The economic impact of soccer represents only the tip of the iceberg. Indeed, several researchers have pointed out the central and growing position occupied by sport in general as a component of culture, economic, and social powers in many countries (Anne and Chéron 1990; Pitts and Stotlar 2002). Along those lines, Lever (1983) compares baseball and baseball games to religion and ritual masses for American fans. Another remarkable example of sport's influence on wider social and cultural issues is the impact of France's victory in the 1998 soccer World Cup. The victory triggered a trend of reconciliation and unification efforts among France's different social and

ethnic groups. "Les Bleus," a multiethnic team, succeeded in less than a month, where politicians had failed for years, to prove that different ethnic groups can share a winning vision. The Vision Asia program launched by the FIFA, which tries to bring organized soccer and school support to countries plagued by conflicts, is an additional example of the wider social involvement of sport in the 21st century.

The global visibility of sport-related services is further enhanced by the multiplication and ease of worldwide communications and transportation (Chalip, Green, and VanderVelden 2000; Delpy and Bosetti 1998; Schaaf 1997). As a result of this increased visibility, sporting events now represent an important market potential for sponsors with an economic value, which has been estimated at about \$213 billion in 2001 (Trail, Fink, and Anderson 2003). In fact, sporting events provide a strong emotional content/value to consumers and therefore occupy a prominent role in their lives, often worth spending large amounts of money (Cialdini 2000).

Unraveling the motivations that bring individuals in front of their TV or to stadiums is vital to the industry and represents a growing concern for both researchers and practitioners (King 2004; Kwon and Trail 2003; Swanson et al. 2003; Trail, Fink, and Anderson 2003; Wann 1995). In addition to contextual motives (scarcity, price, etc.), the spectator of a sporting event is often described as having an inherent predisposition to attend this event (Cialdini 2000; King 2004; Mullin, Hardy, and Sutton 2000; Wann 1995). It is, therefore, important for managers to understand the underlying dimensions of this orientation or inclination toward consuming sporting events.

Several attempts in the services marketing literature (Arnould and Price 1993; Unger and Kernan 1983) and in the sports marketing literature (James and Ross 2004; Kwon and Trail 2003; Wann 1995) have been made to grasp these intrapersonal motivations. Furthermore, studies in consumer research have contributed some rich, qualitative content (e.g., Arnould and Price 1993; Cialdini 2000; Holt 1995) but did not provide clear measurements of these motivations or their manifestations. In contrast, researchers in sports marketing have developed measures to capture intrapersonal fan motivations (James and Ross 2002; Trail and James 2001; Wann 1995) but have encountered problems in replicating and validating their findings across different sports and settings (Kwon and Trail 2003). In addition, the existing scales contain as many as 8 or 10 basic motives that, despite some content value, practitioners find difficult to use and incorporate in their segmentation studies and, hence, keep relying solely on demographics (King 2004). Sports marketers obviously need a more concise and applicable instrument that permits distinguishing between general motivational differences.

Therefore, our main objectives are as follows: (a) to define the concept of orientation toward a sporting event (OSE) and develop a reliable instrument that captures its various facets, (b) to carefully validate the OSE scale in different contexts, and (c) to illustrate how this instrument may be used as a valuable segmentation tool by service providers involved in the sports and entertainment industries.

CONCEPTUAL FRAMEWORK

The Concept of Orientation

In the consumer behavior literature, the construct of orientation refers to an individual's specific inclination toward the adoption of a predictable behavior during a given consumption act (Kantanen 1993). The predictable nature of the behavior adds to the orientation concept a sense of duration and stability over time. Parsons and Shills (1967) highlight the importance of motivation and values as the two defining components of orientation. The motivation aspect calls upon the capacity of a given service or product to satisfy a particular need of the consumer. The values dimension calls upon the values endorsed by the individual, which direct his or her behavior in a given context. Orientation, therefore, has its origins in the needs and values of the individual. In the case of sporting events, the motivation component refers to the event's ability to satisfy specific needs of the individual, which can be met most suitably by this product. For instance, such needs might include the desire to be a part of some unforgettable moments of the sport's history and the desire to express one's joy (shout, applause, etc.).

The value component is often manifested when the consumer has to make a choice between various leisure activities and chooses a specific sporting event in line with his or her value system. In the marketing literature, the concept of orientation is often presented as a proxy for enduring involvement (Laurent and Kapferer 1986). According to this approach, a consumer is involved in sporting events because of group compliance issues and sign values attached to the consumption of the event (ritual, outfit, cheers, etc.). This notion of group affiliation is presented in the sports marketing literature as the key rationale in explaining high levels of fan involvement (King 2004; Wann 1995). The shared signs and meanings offer the fan the opportunity to choose what group he or she wants to belong to (quiet experts, noisy face-painted season ticket holders, etc.). The sign value can be displayed through the choice of a particular sport (golf vs. football) but also through the way the event is experienced (VIP boxes or bleachers).

Another important concept, often associated with studies of orientation, is that of modality (Hirschman 1984; Laaksonen 1987; Parsons and Shills 1967). The modality of an object represents the number of coherent dimensions exhibiting the content of that object. An individual's orientation (motivation + respect of values) toward a sporting event can be expressed through several displays (modalities). For instance, a spectator may have an orientation toward a sporting event and show this orientation through high levels of hype and/or pleasure that the event provides (Wann 1995), whereas another one may have the same overall orientation but appreciate it for relational/social motives (Swanson et al. 2003). Therefore, an individual's sports orientation is expressed through different dimensions, which constitute the different modalities that a sporting event can offer. The potential modalities identified in the literature are presented hereafter.

Affect in Consumption: A Key Role in Orientation Toward Sporting Events

Consumer research has long been geared toward explaining certain behaviors using classical models of information processing (Scott, Osgood, and Peterson 1979). Although most of these studies provide fairly accurate descriptions of the cognitive processes at play, they often fail to recognize the influence of feelings, sensations, and pleasure. In doing so, these studies neglect an important aspect of the consumption experience.

In their discussion of hedonistic consumption, Holbrook and Hirschman (1982) brought the multisensorial, imaginary, and emotional aspects of the consumption experience to the forefront of research on consumer behavior. The sports marketing literature considers these elements (i.e., the multisensorial, imaginary, and emotional aspects of consumption) as essential determinants of consumer involvement. Wann (1995), in particular, claims that motives such as the entertainment value, the ability to escape from reality, and the eustress (mix between euphoria and stress) lead to increased consumer identification with a given team or sport.

Orientation Toward Sporting Events and Social Interaction

Social integration can be seen as an effort to include oneself in a particular social group. Traditionally, social groups have been defined in terms of demographic variables (age, gender, social and economic class, etc.). In recent years, however, scholars have recognized the importance of consumption habits and shared norms and values in forming or defining social groups (Cova and Svanfeldt 1995; Holt 1995; Shank 1999). By freely choosing to at-

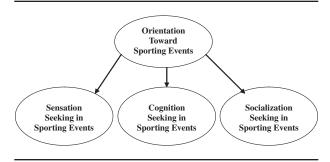
tend a sporting event, the individual initiates a process to include himself or herself in a certain social group composed of other individuals who share similar taste and consumption habits while moving away from other dissimilar groups. This phenomenon has been widely documented in studies of fan affiliation and rituals (Holt 1995; Trail and James 2001; Wann 1995). Socializing rituals performed before, during, or after a given sporting event are reflective of an individual's orientation toward this sporting event because he or she chooses the sporting event over other forms of leisure to interact socially and share his or her emotions.

The presence of a social component in the sporting event experience is depicted in fan behavior studies by Cialdini (2000) and Snyder, Lassegard, and Ford (1986). Through BIRGing (basking in reflected glory), fans align themselves with successful teams to be perceived by others as successful individuals. Fans also CORF (cut off reflected failure) and cut their association with a losing team to avoid being seen as losers. Most professional sports teams wish to avoid CORF behaviors and strive to build strong social ties with their fans that last through hard times. The ubiquity of BIRG and CORF behaviors among sports fans clearly demonstrates the presence and importance of a social factor in consumers' orientation toward sporting events.

The Sport "Connoisseur": Let's Express Our Orientation Toward Sporting Events

Although the affective and social dimensions underlying consumers' orientation toward sporting events have generally received a great deal of attention, the utility derived from an increased level of knowledge has rarely been discussed in the literature (Swanson et al. 2003; Trail, Fink, and Anderson 2003). The enjoyment of cognitive effort appears in several research streams ranging from personality and motivation to information processing (Venkatraman and Price 1990). Caccioppo and Petty (1982), for instance, suggest that there are chronic differences in individuals' tendency to engage in and to enjoy thinking, whereas Venkatraman and MacInnis (1984) describe cognitive individuals as rational and logical thinkers who like to know how things work. Interestingly, Venkatraman and MacInnis identified a group of consumers who have both a hedonistic and a cognitive orientation. These consumers, dubbed "experience seekers," tend to use both affective and cognitive modes to attain satisfaction during a consumption act. Similarly, during the consumption of a sporting event, some spectators may seek to satisfy their cognitive needs as well as their hedonistic and social needs.

FIGURE 1 **Measurement Model of Consumers' Orientation Toward Sporting Events**



Furthermore, sports fans often experience a need to identify with the actors (King 2004; Wann 1995) in addition to identifying with the team (Mael and Ashforth 1992; Swanson and Gwinner 2000). Such identification impels the spectator to become an expert and to affirm his or her mastery. Extreme mastery, however, is only attainable through acquiring extensive knowledge of the sport of interest. The accumulated knowledge, in turn, allows the spectator to socialize and share his or her experiences with other knowledgeable participants, suggesting a correlation between the socialization and the cognition facets of consumer orientation toward sporting events.

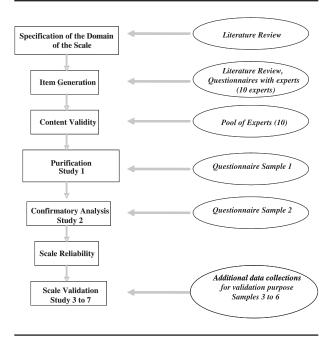
SCALE DEVELOPMENT

Based on the previous discussion, we propose a threedimensional conceptualization of consumer OSE. If a consumer has an inclination toward a sporting event, then this individual should display affective, cognitive, and social cues to express this orientation (see Figure 1). A scale measuring the three facets of OSE was developed following Churchill's (1979) paradigm for scale development and similar guidelines offered by DeVellis (1991). This multistage process is presented in Figure 2, and a summary of the studies conducted and samples used is presented in Table 1.

Item Development

To generate an adequate bank of items that reflect the cognitive, affective, and social facets of OSE, we first conducted an extensive literature review and semiformal interviews with knowledgeable experts (spectators, organizers, participants, etc.). Subsequently, we modified a number of items drawn from existing scales and literature review (Unger and Kerman 1983; Wann 1995) as well as from qualitative data collected from consumers to fit the

FIGURE 2 Scale Development Procedure



specifics of our study (Arnould and Price 1993; Holbrook 1982, 1986, 1990; Holt 1995). This resulted in an initial sample (6-10 items for each dimension), composed of both positively and negatively worded items. Next, 20 experts (Ph.D. students, professors) in the areas of services, sports marketing, and consumer behavior were identified, and half of them (10) were used to generate additional items. The experts were presented with a cover letter, definitions of each of the three dimensions of OSE, and sample items. They were asked to use their expertise to provide additional items for each dimension. The exercise provided a pool of 68 items (20-26 items for each of the three dimensions).

Content Validity

The remaining experts (10) were asked to review the list of items that had been developed and evaluate how relevant they thought each of these items was with respect to what it was intended to measure. This procedure acts as a content validity check for the scale to be developed (Bearden, Hardesty, and Rose 2001; Bearden, Netemeyer, and Teel 1989). They were also asked to evaluate the items' clarity and conciseness. The decision to keep an item in the scale was contingent on having at least 8 experts (out of 10) judge that this item is relevant and usable in our measurement tool. This process reduced the number of items to 55. The remaining 55 items were then inte-

Study	Page Reference	Nature of the Sample	Population Interviewed	Usable Responses	Response Rate (%)
1. Purification	13	Sample 1: undergraduates (in-class)	200	186	93
2. Confirmatory factor analysis	14	Sample 2: undergraduates	346	234	67
3. Construct validity	17	Sample 2: undergraduates	346	234	67
4. Known group validity	17	Sample 4a: chat room fans (nonstudent)	NR	122	NA
		Sample 4b: mix of undergradua and nonstudents	ates NR	122	NA
5. Cross-cultural validity	19	Sample 5a: nonstudents in Montreal Sample	282	226	80
		5b: nonstudents in Beirut	286	187	65
6. Cross-sports validity	21	Sample 6a: nonstudents at baseball games	NR	208	NA
		Sample 6b: nonstudents at			
		hockey games	NR	210	NA
7. Nomological validity	23	Sample 2: undergraduates	346	234	67
8. Consumers' profile	24	Sample 2: undergraduates	346	234	67

TABLE 1
Summary of Studies Performed and Samples Used

NOTE: Ninety-seven percent of all Canadian subjects responded to the English-language version of the orientation toward a sporting event (OSE) scale, as did 91% of the Lebanese subjects in Sample 5b. NR = not recorded (only usable questionnaires were counted); NA = not applicable (response rate not computed when overall number of interviews not recorded).

grated into a questionnaire to be administered at the purification stage.

Study 1: Purification Stage

Method. The purpose of this stage is to purify the measurement tool based on its psychometric properties. It is used to assess the properties of the items, and only the most adequate ones would remain in the scale for the next stage (Churchill 1979; Reinecke Flynn, and Pearcy 2001). Each item was formatted into a 5-point (totally agree to totally disagree) Likert-type response scale. Items reflecting the three dimensions were included in a random order. No specific type of sporting event was mentioned in the questionnaire. The generic term sporting event was used instead. The survey was distributed to 200 students in undergraduate marketing courses. The final development sample size included 186 respondents (Sample 1, response rate 93%).

Results. Following analytical methods described in the literature (e.g., Bearden, Hardesty, and Rose 2001; DeVellis 1991; Pedhazur and Schmelkin 1991), several analyses were performed. First, interitem correlations were examined, and a 0.20 criterion was applied for retention (Bearden, Hardesty, and Rose 2001; Tepper Tian, Bearden, and Hunter 2001). Second, using a principal component method, a series of exploratory factor analyses was performed. Items that had a factor loading below 0.50 and those with high loadings on multiple dimensions were eliminated from the scale after each factor analysis

until satisfactory psychometric properties were achieved (Bearden, Netemeyer, and Teel 1989). These analyses revealed a three-factor solution and resulted in a reduced scale of 15 items (5 items per factor). The final factor analysis explained 72% of the total variance. In addition, Cronbach alphas for the three dimensions were above .83.

The complete listing of the final 15 items to be used in the confirmatory stage is presented in Table 2. A Frenchlanguage version of the scale was developed, refined, and tested in parallel with the English. However, 97% of all Canadian subjects in the studies reported below responded to the English-language scale, as did 91% of Lebanese subjects in Sample 5b.

Study 2: Confirmatory Analysis: Assessment of the Latent Structure

Method. The questionnaire used in this study contained the 15-item OSE scale and measures of several personality traits, which were incorporated to evaluate the validity of the scale. These measures included reduced forms of the emotional response (Mehrabian and Russell 1974), social preference (I-O, Kassarjian 1962), need for cognition (Caccioppo and Petty 1982), and change seeking index (Steenkamp and Baumgartner 1995) scales. They were adapted to a 5-point Likert-type scale format for consistency and ease of comparison. The questionnaire also contained measures of leisure habits, purchase behavior of sports-related items (e.g., newspapers, specialized magazines, clothing or hats with one's team name or slogan, and

TABLE 2 **Orientation Toward Sporting Events Scale**

Socialization Dimension

- 1. I am often involved in conversations about sporting events.
- 2. I like talking about sporting events with people I know.
- 3. Watching a sporting event on TV is a good opportunity to socialize with one's friends.
- 4. I generally share my thoughts and feelings about sporting events with others.
- 5. Attending sporting events is a good opportunity to socialize.

Sensation Seeking Dimension

- 6. For me, attending sporting events is a real pleasure.
- 7. I am always excited when I am going to a sporting event.
- 8. I am always enthusiastic when I think about attending a sporting event.
- 9. When I attend a sporting event, I sometimes feel like I am part of the event.
- 10. I feel really happy when I can attend a sporting event.

Cognition Seeking Dimension

- 11. Watching sporting events gives me greater familiarity with the stars of the game.
- 12. I consider myself as a sports expert.
- 13. I can talk about sports tactics and strategies as well as professional sports reporters.
- 14. I know very little about sports.
- 15. I am really interested in any information regarding sports (records, scorers, contracts).

NOTE: A French-language version of the scale was developed, refined, and tested in parallel with the English version. Copies of the French scale may be obtained from the authors.

brand names associated with a particular sport or a particular team), and demographic variables.

A total of 346 questionnaires were distributed to a sample of undergraduate students in a Canadian university. The data were collected in various faculties during lunch breaks. Respondents were instructed to complete their questionnaires and leave them on the table to be picked up by the interviewer. Of the questionnaires, 234 were considered usable (Sample 2, response rate 67%). The sample included 55.6% of males and 44.4% of females. The average age was 24.23, with a standard deviation of 5.4, which indicates a fairly older group than the typical undergraduate student.

Results: Dimensionality and reliability of the OSE scale. According to our theoretical conceptualization, the OSE scale should exhibit the latent structure of a secondorder model, in which three dimensions are first-order factors and are collectively accounted for by a second-order factor (Tepper Tian, Bearden, and Hunter 2001).

The hypothesized model, shown in Figure 1, was evaluated through a confirmatory factor analysis (CFA) using the EQS structural equation modeling software of Bentler (1992). Results of the CFA analysis suggest good fit of the model to the data. The comparative fit index (CFI, 0.965) and the root mean square error of approximation (RMSEA, 0.048) are both in line with the established criteria (CFI above 0.90 and RMSEA below 0.07; Bollen, 1989). Another traditional indicator of model fit is the chisquare statistic and its p value. However, due to chisquare's sensitivity to relatively small sample sizes and distributions (Browne and Cudeck 1989), a modified version of this indicator, the adjusted $\chi^2(\chi^2/df)$ was adopted.

Here again, the adjusted $\chi^2(\chi^2/df = 130.5/84 = 1.55)$ is below the prescribed limits of 2.5 to 4 (Bollen 1989; Carmines and McIver 1981).

To assess the relative quality of the hypothesized structure over competing models, four alternative factor structures were also evaluated (a null model [Model 1], a unidimensional model for which all 15 items were forced to load on a single factor [Model 2], a three-factor uncorrelated model [Model 3] for which items loaded on three uncorrelated factors, and a similar three-factor but correlated model [Model 4]). Because of their nested nature, these models could be compared using chi-square difference tests. The results, presented in Table 3, indicate that the second-order factor model with three first-order factors fits the data significantly better than any of the alternative models. These findings are consistent with our theoretical conceptualization of OSE. In addition, the OSE scale appears to have good internal consistency, as indicated by Cronbach alphas of .89, .94, and .96, respectively, for sensation seeking, cognition seeking, and socialization and by significant t values associated with the loading estimates given (Gerbing and Anderson 1988).

Studies 3 to 7: Scale Validation

Once the reliability and the structure of a scale are supported, the validity of the instrument has to be assessed. Evaluations of convergent and discriminant validity (construct validity) are commonly performed in scale development studies. In addition to these validity checks, knowngroup validity, cross-cultural validity, and nomological validity were tested in this research to provide researchers

Degrees of Chi-Square Difference Comparative Root Mean Square Model Chi-Square Freedom (df Difference) Fit Index Error of Approximation Null (Model 1) 863.13 113 NA NA 431.88 (23)** One factor (Model 2) 431.25 90 75.3 0.16 Three-factor uncorrelated (Model 3) 167.09 88 264.16 (2)** 91.5 0.071 33.28 (3)** 0.052 Three-factor correlated (Model 4) 133.81 85 96.2 Second order (Model 5) 130.05 84 3.96 (1)** 96.5 0.048

TABLE 3
Competitive Models and Relative Fit Quality

NOTE: NA = not applicable.

and practitioners with a robust and valid measurement tool.

STUDY 3: CONSTRUCT VALIDITY

According to Fornell and Larcker (1981), convergent validity is established when the average variance extracted (AVE) from the measures of a construct (dimension) is superior to the 50% threshold. Discriminant validity is established when the variance shared between constructs (dimensions) is inferior to the AVE. Construct validity of the OSE scale was assessed, using the data from Study 2. The results are presented in Table 4. They support the convergent and discriminant validity of the scale. Moreover, the correlation between each pair of dimensions in our scale, plus or minus two standard errors, did not include the unity (Anderson and Gerbing 1988; Bearden, Hardesty, and Rose 2001). This result gives additional strength to the discriminant validity of our scale. We can thus conclude that the OSE scale presents acceptable levels of construct validity.

STUDY 4: KNOWN-GROUP VALIDITY

To provide additional evidence of validity for the OSE scale, known-group validity was assessed through the comparison of mean scores for the three first-order factors as well as the overall orientation latent construct between two groups of respondents that should, a priori, have scored either high or low on these constructs (Bearden, Hardesty, and Rose 2001; Lastovicka et al. 1999; Tepper Tian, Bearden, and Hunter 2001).

Method. Data were collected from two different groups. The first group consisted of hockey fans, recruited from hockey chat rooms on the Internet. A message was posted on their board, indicating that a researcher was looking for individuals who had attended at least three professional sporting events during the past 2 months. A total of 122 respondents volunteered for the survey and completed, via instant messaging, a short version of the

TABLE 4
Construct Validity of the Orientation Toward
Sporting Events (OSE) Scale

Convergent Validity	Average Loading	Average Variance Extracted	
Socialization seeking (F1)	0.80	0.64	
Cognition seeking (F2)	0.87	0.75	
Sensation seeking (F3)	0.77	0.59	
Average	0.81	0.66	
Discriminant Validity	Variance Shared Between Constructs		
F1-F2	0.36		
F3-F2	0.05		
F1-F3	0.10		

questionnaire (only the OSE scale). Respondents (Sample 4a) were predominantly male (75%), and the average age in this group was 35.3. The second group was obtained by asking undergraduates enrolled in a marketing research class to interview 122 respondents who had never attended a professional sporting event and who did not plan to do so in the coming year. The students were instructed to avoid interviewing other undergraduate students and to focus on nonstudents (family members, friends, etc.). The final sample (Sample 4b), however, had an average age of 26.1, suggesting a potential mix of students and nonstudents in Sample 4b. Fifty-eight percent of the respondents in this group were male.

Results. A valid OSE scale should be able to capture significant differences between the scores of the two groups. Tests of the mean differences between the two groups for the three first-order factors were all significant (at p < .01) and in the expected direction. Similar results were found for an aggregate measure of OSE ($M_{\text{sportfans}} = 4.4 \text{ vs. } M_{\text{sportaverse}} = 2.1$), $F_{(1,242)} = 100.8$, p < .001. These results provide additional support for the validity of the orientation toward sporting event scale.

The next step in validating our scale is to test the stability of the instrument across different situations.

^{*}p < .05. **p < .01.

STUDY 5: CROSS-CULTURAL VALIDITY

Arabic and Caucasian North American cultures have been shown to differ significantly on many aspects (e.g., Altman and Vinsel 1977; Baxter 1970). Evaluating the reliability and validity of the scale in such different settings should offer a stringent test of the stability of the scale.

Method. Like in Study 4, the questionnaire used in this study contained only measures of the OSE scale and demographic variables. As part of a marketing research class activity on mall-intercept interviews, undergraduate students were asked to interview nonstudent respondents in Montreal (Canada). Data collection was monitored by a graduate assistant to ensure that the requirements were met. A total of 282 questionnaires were distributed, which resulted in 226 valid responses (Sample 5a, 80% response rate, 62% male, average age = 39.2).

A few months later, the same procedure for data collection was used in Beirut (Lebanon). A total of 286 questionnaires were distributed for a total of 187 responses (Sample 5b, 65% response rate, 67% male, average age = 35.1).

The analysis consisted of several multigroup CFAs to assess the measurement invariance of the instrument. We were particularly interested in the configural invariance and the metric invariance of the scale (Durvasula, Lysonski, and Watson 2001).

Results. The hypothesized higher order structure with three first-order factors was specified, and the fit for each sample was evaluated. The minimum requirement for the OSE measure to be invariant cross-culturally is to show that the hypothesized structure provides a good fit in the two cultural groups (Durvasula, Lysonski, and Watson 2001). Indeed, items of the scale should exhibit similar zero loadings on nonsalient factors and nonzero loadings on salient factors (Horn and McArdle 1992). In this case, the hypothesized model had an adjusted chi-square of 1.60 $(\chi^2/df = 134.5/84 = 1.60)$, a CFI of 0.958, and an RMSEA of 0.071 in the Canadian sample and an adjusted chisquare of 1.74 ($\chi^2/df = 146.6/84 = 1.74$), a CFI of 0.942, and an RMSEA of 0.073 in the Lebanese sample. Furthermore, all the item loadings were significant (p < .05) on their respective dimension for the two populations. These results indicate a similar factor structure for the OSE measure across the two samples (configural invariance).

Configural invariance suggests that the items and the structure used to conceptualize OSE are similar in the two cultural groups. It does not, however, imply that consumers respond to the items following the same pattern. To indicate whether responses to the scale items could be compared meaningfully across the two groups, one has to conduct a metric invariance test (Durvasula, Lysonski, and Watson 2001; Steenkamp and Baumgartner 1995). To this end, a multigroup analysis was performed, in which item loadings were constrained to be equal across the two cultural groups. The results showed a poor fit to the data (adjusted chi-square 5 of 6.08, a CFI of 0.65, and an RMSEA of 0.102) and therefore a lack of metric invariance.

A closer look at the constraints indicated that 12 constraints out of 18 should be released. Most of these constraints concern measurement of the cognitive and social dimensions. After releasing the ill-specified constraints, the model showed a significant improvement (adjusted chi-square of 3.10, a CFI of 0.86, and an RMSEA of 0.072). It appears that, compared to Canadian consumers, Lebanese consumers express their orientation toward sporting events more through social and affective manifestations. In contrast, Canadian consumers tend to display more cognitive manifestations to express their orientation toward sporting events.

Despite the lack of metric invariance, Study 5 uncovered a significant configural invariance, suggesting that consumer OSE has the same basic structure across these two cultural groups, thus offering partial evidence of cross-cultural validity of the scale.

STUDY 6: CROSS-SPORTS VALIDITY

Method. An additional study was performed to assess the validity of the scale across different types of sporting events. A short survey (demographics and OSE measurement) was administered to two groups of fans, either before a baseball or a hockey game. The data were gathered from fans who attended one of three home games in the middle of the hockey and baseball seasons in Montreal. Both teams were major league teams. A total of 418 (208 for baseball and 210 for hockey) questionnaires were collected from spectators waiting in line to purchase tickets or enter the arena. The baseball sample (Sample 6a) was composed of 56.9% of males with an average age of 39.8 years. The hockey sample (Sample 6b) included 51.8% of males with an average age of 28.1 years.

Results. The scale showed strong configural invariance (same basic structure) but limited metric invariance, suggesting that orientation is not expressed in the same manner across baseball and hockey fans. Results from the multigroup analysis indicated that 7 constraints out of 18 must be released. These constraints involve loadings on the cognitive and affective dimensions. After freeing these constraints, the model fit improved significantly (adjusted chi-square of 3.87, a CFI of 0.84, and an RMSEA of 0.070). Interestingly, the findings indicate that the orientation concept has a stronger cognitive component for baseball than for hockey but a stronger affective component for hockey than for baseball. Therefore, in addition to capturing the overall orientation toward sporting event, the scale

	Alpha (Cronbach)	Socialization Seeking	Cognition Seeking	Sensations Seeking
Emotional response (PAD scale)	0.86	0.41**	0.21*	0.78**
Change seeking index (CSI scale)	0.93	ns	ns	0.30*
Oriented toward others (I-O scale)	0.90	0.77**	0.29*	ns
Need for cognition (NFC)	0.85	0.13*	0.65**	0.19**

TABLE 5
Nomological Validity of the Orientation Toward Sporting Events (OSE) Scale

can be applied in different situations to capture nuances that may be of great interest to sports marketers.

STUDY 7: NOMOLOGICAL VALIDITY

The nomological or network validity refers to "the extent to which predictions based on the concept which an instrument purports to measure are confirmed" (Zaltman, Pinson, and Angelmar 1973). These predictions may be related to antecedents, consequences or modifying conditions attached to the concept that is studied (Iacobucci, Ostom, and Grayson 1995; Tepper Tian, Bearden, and Hunter 2001). Using the data from Study 2 (Sample 2), the nomological validity of the OSE scale was assessed by correlating the OSE dimensions with several personality traits. For instance, it was expected that sensation seeking in the OSE scale would be positively correlated with the change seeking index and the emotional response measured by the PAD scale. Moreover, the cognitive search in sporting events was expected to be positively correlated with the general need for cognition trait. Finally, the socialization aspect in sporting events was expected to be positively related to the orientation toward others scale (I-O, Kassarjian 1962). All the results were significant and in the expected direction (Table 5), attesting to some nomological validity for the OSE scale.

STUDY 8: PROFILING CONSUMERS BY TYPE OF ORIENTATION AND CONSUMPTION HABITS

From a practical and industry point of view, it is particularly interesting to relate an individual's orientation toward a sporting event to his or her purchasing behavior of sports-related products. OSE can indeed provide a useful segmentation tool to practitioners in the entertainment industry, which will complement the more commonly used sociodemographic or behavioral segmentations (James and Ross 2004). Study 8 attempts to demonstrate how a typology of sporting events consumers can be developed based on their type of orientation. This typology should contribute to explaining why fans display certain consumption behaviors.

Using data from Sample 2 and a cluster analysis, performed on the three first-order factors (socialization, cognition, and sensation), we identified four different groups. For each of these groups, additional information is provided with regards to consumption scores and demographics. The results are detailed hereafter and summarized in Table 6.

The first group can be called the "super fan" cluster. It includes individuals with high scores on each dimension of OSE (all above 4 on a 5-point scale). These individuals present a strong general orientation toward sporting events (4.20 out of 5) and engage in behaviors that are in line with this strong orientation. They are the ones who attend sporting events most frequently (either live or on TV), who spend the most on tickets or pay-per-view, and who buy sports-related magazines, memorabilia, and brands associated with events they follow most frequently. They are also among the ones who practice sports the most (5.69 hours a week on average). In our sample, they represent 38 respondents.

The second group includes individuals who are moderately sports oriented in general (3.5 on 5) but who display a strong orientation for the social aspect of sporting events (equal to the level of the super fan). These consumers also have a reasonably high level of cognitive orientation for sporting events, supporting the argument that a fan needs to know about the sport before he or she can socialize. This group is characterized by a medium to high level of memorabilia purchase (to show its belonging), average levels of TV or live events attendance, and an average level of spending on sporting events. This group can be called the "social fan" group and comprises 83 consumers in our sample.

The third category in our typology describes consumers who have a moderate general sports orientation (comparable to the social fan group) but who display a high sensation-seeking level (comparable to the super fan one) in their orientation toward sporting events. These consumers attend or watch sporting events quite frequently. However, they spend very little on memorabilia and sports magazines. They practice sports more often than the other groups. Their information needs are limited, as they are

^{*}p < .05. **p < .01 (correlation coefficient).

	TABLE 6	
Cluster	Analysis	Results

Final Cluster Centers					
	Cluster				
	Social Fan	Super Fan	Experiential Fan	Fan by Default	
FREQ (attendance from 1 to 5)	2.62	3.27	2.78	2.13	
BUDGET (monthly for sporting events)	20.30	86.72	49.20	14.61	
TELE (weekly hours)	5.10	9.21	6.36	2.71	
PRESSESPORTS (read from 1 to 5)	2.40	3.85	1.50	2.74	
BUYMAG (from 1 to 5)	2.54	3.74	1.85	1.75	
BUYMEMOR (from 1 to 5)	3.45	3.78	2.38	1.70	
BUYBRANDS (from 1 to 5)	2.75	3.42	2.40	1.50	
PRACTICE (weekly hours)	3.65	5.69	5.90	1.20	
AGE	23.74	25.44	22.10	27.76	
SENSATIO (from 1 to 5)	2.74	4.02	4.00	2.35	
SOCIAL (from 1 to 5)	4.45	4.46	3.62	3.15	
COGNITIF (from 1 to 5)	3.30	4.12	3.48	2.90	
ORIENTATGENERAL (from 1 to 5)	3.50	4.20	3.70	2.80	

mainly interested in the thrill and excitement aspect of attending or watching a sporting event. This group can be labeled the "experiential fan" group and comprises 56 consumers in our sample.

The fourth group presents the lowest general orientation toward sporting events. It includes consumers who do not practice sports frequently, who only occasionally watch or attend sporting events, and who buy very little memorabilia and sports magazines. Interestingly, even these apparently noninterested consumers indicate minimum levels of purchase and attendance. It is as if the baseline level of sports orientation, even for nonoriented consumers, is higher than the zero-interest level. This argument is supported by the omnipresence of sporting events in modern lives. Sometimes, people see, hear, or even talk about sports despite their lack of interest or real desire to do so. Therefore, this group comprising 57 respondents can be labeled the "situational fan" group. The results of this profiling demonstrate the applied segmentation value of the OSE scale by giving a clear representation of the orientation profile for the undergraduate students surveyed in Sample 2.

CONCLUSION

Sport occupies an increasingly important place in the economic and social spheres of modern societies. In fact, modern consumers often spend large amounts of money on attending sporting events and consuming sport-related goods and services. In this article, we attempted to understand the general motives underlying consumers' orientation toward a sporting event. We identified motives related

to sensation, cognition, and socialization and developed a three-dimensional scale of consumer OSE, designed to capture these motives. Our conceptualization adds to previous efforts at measuring fan motivation, particularly by reinstating the cognitive component as an essential part of the leisure experience. The OSE scale was submitted to a rigorous validation process and proved to be a generally valid and reliable tool for sports marketers to use in their journey through motivational segmentation. Indeed, the scale's structure was shown to be stable across various sports and samples. Scale development is often a difficult process due to problems of external validity and reliability of the instrument. In this research, we really wanted to limit these potential issues, and we tested our instrument in several different contexts over a period of 3 years. Through these multiple studies across sports, we were able to identify segments of consumers with similar motivations despite very different sociodemographic profiles and who were involved in very different sports. Our results suggest to practitioners that all sports fans seem to share the same basic motivations but value them differently depending on the situation.

Of particular pertinence to practitioners, we offered a concrete application of how the OSE scale may be used as a motivational segmentation tool. This form of segmentation is complementary to the behavioral or sociodemographic segmentation typically used by sports marketers. Indeed, although behavioral and sociodemographic segmentations are mostly descriptive, the motivational approach to segmentation helps answer the following questions: Why do fans attend our event? What kind of experience are they looking for? (King 2004). For example, a marketer who uses a simple behavioral segmentation may conclude that there exists a distinct segment of consumers who spend about \$20 a month on sporting events and watches 5 hours a week of sports on TV (see Table 6). Using the OSE scale allows us to enrich that description by showing that fans in that category are motivated mainly by the social value of sporting events. Such information is valuable because it suggests to marketers that a communication strategy built around the social value of the event would be most effective in targeting that segment. Moreover, a segmentation based solely on behavioral variables may fail to distinguish between groups of consumers with highly different needs. In our study, for instance, simply using attendance levels and TV viewership as a basis for segmentation would fail to discriminate between the social fan and the experiential fan groups. Clearly, these two groups have distinct motivations. Despite similar attendance levels, social fans are motivated by the social value (score in our scale-social dimension: 4.45/5) of the event, whereas experiential fans search for sensation (score in our scale-sensation dimension: 4/5).

As is the case for most studies, the use of student samples constitutes a serious limitation of this research. In particular, many sports fans are not as well educated as students and might experience difficulty articulating their views through responses to the OSE scale. However, several aspects of our methodological design should contribute to the reduction of this potential limitation. First, although using undergraduate students in the early stages of the research (purification and confirmatory factor analysis) may not be optimal, we were able to replicate the structure of our scale in later analyses using nonstudent samples and show evidence of the stability of our measurement instrument across different contexts. In addition, even though undergraduates are often considered "not real" consumers, they represent a critical market for entertainment and sports services and therefore justify, at least in part, their inclusion in this study. The use of student samples is more problematic in the case of our profiling study (Study 8). Clearly, our findings pertaining to the typology of sports fans cannot be generalized to other populations. This, however, was not the objective of Study 8, which was merely an illustration of how our instrument can be used to perform a motivational segmentation. As future research, it would be particularly appropriate to replicate the segmentation study in the context of a larger nonstudent sample.

Additional research should also include qualitative work to better qualify each of the dimensions captured in the OSE. This is a critical step to offer both researchers and practitioners a clearer understanding of consumers' segment and clues on how to effectively reach these groups of fans. It is particularly necessary to disentangle the sensa-

tion seeking dimension that encompasses several facets. In addition, it would be interesting to examine the applicability of the OSE scale in nonsports contexts such as movies, concerts, or festival and to compare consumers' orientation.

REFERENCES

- Altman, I. and A. M. Vinsel (1977), "Personal Space: An Analysis of E. T. Hall's Proxemics Framework," in *Human Behavior and Environment: Advances in Theory and Research*, Vol. 2, I. Altman and J. Wohlill, eds. New York: Plenum.
- Anderson, J. C. and D. W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," Psychological Bulletin, 103 (November), 411-23.
- Anne, F. and E. J. Chéron (1990), Mesure de l'efficacité du sponsoring: une analyse des effets intermédiaires sur l'audience directe de l'évènement. Québec: Université Laval, Faculté des sciences de l'administration.
- Arnould, E. and L. Price (1993), "River Magic: Extraordinary Experience and the Extended Service Encounter," *Journal of Consumer Re*search, 20 (6), 24-45.
- Baxter, J. C. (1970), "Interpersonal Spacing in Natural Settings," Sociometry, 33, 444-56.
- Bearden, W. O., D. M. Hardesty, and R. L. Rose (2001), "Consumer Self-Confidence: Refinements in Conceptualization and Measurement," Journal of Consumer Research, 28 (June), 121-33.
- ——, R. Netemeyer, and J. Teel (1989), "Measurement of Consumer Susceptibility to Interpersonal Influence," *Journal of Consumer Re*search, 9 (March), 183-94.
- Bentler, P. (1992), EQS Structural Equations Program Manual. Los Angeles: BMDP Statistical Software.
- Bollen, K. (1989), Structural Equations with Latent Variables. New York: John Wiley.
- Browne, M. and R. Cudeck (1989), "Single Sample Cross Validation Indices for Covariance Structures," *Multivariate Behavioral Research*, 24, 445-55.
- Caccioppo, J. and R. Petty (1982), "The Need for Cognition," Journal of Personality and Social Psychology, 42 (1), 116-31.
- Carmines, E. and J. McIver (1981), "Analyzing Models with Unobserved Variables: Covariance Structure," in *Social Measurement: Current Is-sues*, G. W. Bohrnstedt and E. F. Borgatta, eds. Beverly Hills, CA: Sage, 65-115.
- Chalip, L., C. Green, and L. VanderVelden (2000), "The Effects of Polysemic Structures on Olympic Viewing," *International Journal of Sports Marketing and Sponsorship*, 2 (1), 23-34.
- Churchill, G. (1979), "A Paradigm for Constructing Better Measures of Marketing Concept," *Journal of Marketing Research*, 16 (1), 64-73.
- Cialdini, R. B. (2000), *Influence: Science and practice*, 4th ed. Boston: Allyn & Bacon.
- Cova, B. and C. Svanfeldt (1995), "Le marketing à l'épreuve du postmoderne," Actes de l'Association Française de Marketing, 414-
- Delpy, L. and H. Bosetti (1998), "Sport Management and Marketing via the World Wide Web," *Sport Marketing Quarterly*, 7 (1), 21-6.
- DeVellis, R. F. (1991), Scale Development: Theory and Applications. Newbury Park, CA: Sage.
- Durvasula, S., S. Lysonski, and J. Watson (2001), "Does Vanity Describe Other Cultures? A Cross-Cultural Examination of the Vanity Scale," *Journal of Consumer Affairs*, 35 (1), 180-99.
- Fornell, C. and D. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.

- Gerbing, D. W. and J. C. Anderson (1988), "An Updated Paradigm for Scale Development Incorporating Dimensionality and Its Assessment," Journal of Marketing Research, 25 (May), 186-92.
- Hirschman, E. C. (1984), "Experience Seeking: A Subjectivist Perspective of Consumption," Journal of Business Research, 12(1), 115-36.
- Holbrook, M. G. (1982), "Hedonic Consumption: Emerging Concepts, Methods and Propositions," Journal of Marketing, 46, 92-100.
- -(1986), "Emotion in the Consumption Experience: Toward a New Model of the Human Consumer," in The Role of Affect in Consumer Behavior: Emerging Theories and Applications, R. Peterson, W. S. Hoyer, and W. R. Wilson, eds. Lexington, MA: Heath, 17-52.
- (1990), "The Role of Lyricism in Research on Consumer Emotions: Skylark, Have You Anything to Say to Me?" in Advances in Consumer Research, G. Horn and R. Pollay, eds. Provo, UT: Association for Consumer Research, 1-18.
- and E. C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, Fun," Journal of Consumer Research, 9 (2), 132-40.
- Holt, D. (1995), "How Consumers Consume: A Typology of Consumption Practices," Journal of Consumer Research, 22 (2), 1-21.
- Horn, J. L. and J. J. McArdle (1992), "A Practical and Theoretical Guide to Measurement Invariance in Aging Research," Experimental Aging Research, 18 (Fall), 117-44.
- Iacobucci, D., A. Ostrom, and K. Grayson (1995), "Distinguishing Service Quality and Customer Satisfaction: The Voice of the Consumer," Journal of Consumer Psychology, 4 (3), 277-303.
- James, J. D. and S. D. Ross (2002), "The Motives of Sport Consumers: A Comparison of Major and Minor League Baseball," International Journal of Sport Management, 3 (3), 180-98.
- (2004), "Comparing Sport Consumer Motivations across Multiple Sports," Sport Marketing Quarterly, 13 (1), 17-25.
- Kahle, L. R., K. M. Kambra, and G. M. Rose (1996), "A Functional Model of Fan Attendance Motivations for College Football," Sport Marketing Quarterly, 5 (4), 51-60.
- Kantanen, T. (1993), "Analysis of the Contents of Theatre Visiting Orientation," thesis in marketing, Faculty of Business Administration, University of Vaasa.
- Kassarjian, W. (1962), "A Study of Riesman's Theory of Social Character," Sociometry, 26 (9), 213-30.
- King, B. (2004), "What Makes Fans Tick?" Sports Business Journal, March, 25-34.
- Kwon, H. and G. Trail (2003), "A Reexamination of the Construct and Concurrent Validity of the Psychological Commitment to Team Scale," Sports Marketing Quarterly, 12 (1), 88-93.
- Laaksonen, Marti (1987), "Shopping Orientation: An Attitude Structure Approach," Proceedings of the University of Vaasa, Research Paper 77, Business Administration 21.
- Lastovicka, J. G., L. A. Bettencourt, R. S. Hughner, and R. J. Kuntze (1999), "Lifestyle of the Tight and Frugal: Theory and Measurement," Journal of Consumer Research, 26 (June), 85-98.
- Laurent, G. and J. N. Kapferer (1986), "Les profils d'implication," Recherches et Applications Marketing, 1, 5-26.
- Lever, Janet (1983), Soccer Madness. Chicago: University of Chicago
- Mael, F. and B. E. Ashforth (1992), "Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification," Journal of Organizational Behavior, 13, 103-23.
- Mehrabian, A. and J. Russell (1974), An Approach to Environmental Psychology. Cambridge, MA: MIT Press.
- Mullin, B. J., S. Hardy, and W. A. Sutton (2000), Sport Marketing. Champaign, IL: Human Kinetics.
- Parsons, T. and E. A. Shills (1967), Toward a General Theory of Action. New York: Harper & Row.
- Pedhazur, E. and L. Schmelkin (1991), Measurement, Design and Analysis: An Integrated Approach. Hillsdale, NJ: Lawrence Erlbaum.

- Pitts, B. G. and D. K. Stotlar (2002), Fundamentals of Sport Marketing, 2nd ed. Morgantown, WV: Fitness Information Technology.
- Reinecke Flynn, L. and D. Pearcy (2001), "Four Subtle Sins in Scale Development: Some Suggestions for Strengthening the Current Paradigm," International Journal of Market Research, 43 (4), 409-23.
- Schaaf, P. (1997), Sports Marketing: It's Not Just a Game Anymore. Amherst, MA: Prometheus Books.
- Scott, W. A., D. W. Osgood, and C. Peterson (1979), Cognitive Structure: Theory and Measurement of Individual Differences. New York: John
- Shank, M. D. (1999), Sports Marketing: A Strategic Perspective. Upper Saddle River, NJ: Prentice Hall.
- Snyder, C. R., M. Lassegard, and C. E. Ford (1986), "Distancing after Group Success or Failure: Basking in Reflected Glory and Cutting Off Reflecting Failure," Journal of Personality and Social Psychology, 51, 382-8.
- Steenkamp, J.-B. and H. Baumgartner (1995), "The Role of Optimum Stimulation Level in Exploratory Consumer Behavior," Journal of Consumer Research, 19 (December), 434-48.
- Swanson, S. R. and B. Gwinner (2000), "A Model of Fan Identification and Sponsorship Success," in AMA Summer Educators' Conference. Chicago: AMA, 147.
- -, B. V. Larson, and S. Janda (2003), "Motivations of College Students Game Attendance and Word-of-Mouth Behavior: The Impact of Gender Differences," Sport Marketing Quarterly, 12 (3),
- Tepper Tian, K., W. O. Bearden, and G. Hunter (2001), "Consumers' Need for Uniqueness: Scale Development and Validation," Journal of Consumer Research, 28, 50-66.
- Trail, G., J. Fink, and D. Anderson (2003), "Sport Spectator Consumption Behavior," Sports Marketing Quarterly, 12 (1), 8-15.
- Trail, T. J. and J. James (2001), "An Analysis of the Sport Fan Motivation Scale," Journal of Sport Behavior, 12 (1), 8-17.
- Unger, L. and J. Kernan (1983), "On the Meaning of Leisure: An Investigation of Some Determinants of the Subjective Experience," Journal of Consumer Research, 9 (March), 457-72.
- Venkatraman, M. and D. MacInnis (1984), "Epistemic and Sensory Exploratory Behaviors of Hedonic and Cognitive Consumers," in Advances in Consumer Research, Elizabeth Hirschman and Morris Holbrook, eds. Provo: UT, Association for Consumer Research, 102-7.
- and L. Price (1990), "Differentiating between Cognitive and Sensory Innovativeness," Journal of Business Research, 20, 293-315.
- Wann, D. L. (1995), "Preliminary Validation of the Sport Motivation Scale," Journal of Sport and Social Issues, 19 (1), 377-97.
- Zaltman, G., C. R. A. Pinson, and R. Angelmar (1973), Metatheory and Consumer Research. New York: Holt, Rinehart & Winston.

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