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DIMENSIONS OF THE CONSUMERS ORIENTATION TOWARDS SPORTING EVENTS : PROPOSITION AND VALIDATION OF THE OSE SCALE

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Dimensions of the consumers Orientation towards Sporting Events: Proposition and validation of the OSE scale.

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Dimensions of Consumers Orientation towards Sporting Events (OSE) : Proposition and Validation of a Scale.

Abstract :

Beside the growing importance of leisure activities in western society, consumers researchers have paid little attention to sporting events. This research underlines the subjective dimensions of of consumers orientation towards sporting events. Based on two studies conducted in Quebec, a confirmatory factor analysis is used to assess the validity of the OSE scale. Lastly, the managerial implications of the findings are discussed.

Orientation des consommateurs par rapport aux évènements sportifs (OES) : Proposition et validation d’un outil de mesure

Résumé :

Malgré l'importance grandissante des activités de loisirs dans la société occidentale, très peu de recherches en comportement du consommateur se sont intéressées aux événements sportifs. Cette recherche met en évidence les dimensions déterminant l’orientation des consommateurs par rapport à l'événement sportif. Sur la base de 2 études réalisées au Québec, l’analyse factorielle confirmatoire permet d’évaluer la validité de l’outil de mesure proposé (OES). Enfin, les implications pratiques sont discutées.
1. Introduction

Under globalization influences such as satellite television, travel and movies, the sporting event is now a worldwide activity recognized as one of the main and best communication media between individuals of all kind. The social and economic impact of sport in our societies has been emphasized by several authors (Gilbert, 1995; Kindall, 1983; Lever, 1983). In fact, sport is the key to important, financial and economical, stakes. For example, it generated 60 million dollars for the american soccer federation during the last world cup (Gilbert, 1995), the television coverage fees were approximatively about 907 million dollars for the Atlanta 1996 Olympic Games (Fortin, Dubois, 1995), in 1994 the National Basket-Ball Association covered 141 countries and reached over 400 million people. Sport is also an important part of the culture and the values of many countries. More than just a communication medium, it is also compared to the modern equivalent of the traditional religious ritual because of its ability to transmit and to develop values and traditions in a social group (Lever, 1983; Gilbert, 1995). Surprisingly, despite the fact that sporting events are mass leisure activities and are active parts of consumers' lives, sources of high levels of amusement, sensations and emotions (Holbrook, Hirschman,1982; Unger, Kernan, 1983), they have received very little attention in marketing research except recently with researchers like Holt (1995) for example.

In fact, most of the studies made in the entertainment consumption field generally focused on "high culture" topics as Opera, theater or classical music. Therefore, studies about the hedonist consumption (Hirschman, Holbrook, 1982; Holbrook, 1986, 1981, 1982) or about subjective dimensions of leisure activities (Iso-Ahola, 1979; Unger, Kernan, 1983) were the first steps to a better understanding of the phenomenon. The particular nature of the "sporting event" product sustains the fact it has to be studied in a specific way to get a better vision of all its aspects. The sport and the sporting event more specifically are complex phenomenons and can not be seen only under the restrictive definition of leisure. Indeed, the consumption experience of a sporting event is an elaborate process which involves many values of the consumer (Holt, 1995).

The objective of this research is to present the dimensions which determine the attitudes and the behaviors of sporting events consumers. These dimensions will be used as the basis to define the orientation of individuals towards sporting events. In concrete terms, the main objective lies in developing a valid scale presenting the dimensions of the orientation of individuals towards sporting events. This article briefly analyzes the concept of the sporting event and the way it interacts with consumers as well as the orientation concept. A conceptual model is presented. Second, the propositions of the study are presented. Third, the methodology of the detailed research is presented in detail and finally, the results are discussed.

1. The conceptual framework

A better understanding of the phenomenon assumes the analysis is done based on a conceptual framework involving the orientation and leisure concepts. The "leisure" side of the sport will be presented with the study of the potential difference between elite sport and mass sport. The sporting event will be studied through its social and relational sides. Finally, the sensations and knowledge seeking made by the consumers will be included.
The consumers orientation:

In consumer behavior, the orientation is defined as the specific inclination of an individual to adopt a foreseeable behavior during an act of consumption. The orientation finds its roots in the needs and the values of an individual. Parsons and Shils (1967) underlined the importance of motivation and values concepts as characteristics of the orientation in general. The "motivation" aspect of the orientation refers to the ability of the activity or the product to satisfy the particular needs of the individual. Then, we would say that he is oriented to this product or activity. The "value" aspect of the orientation refers to the values of the individual that, in a particular context, orient his behavior. In the sporting event case, the "motivation" refers to the ability of the event to fulfill the specific needs of the individual such as attending unforgettable moments of the sport history or such as being able to show his happiness in particular occasions. The "value" usually appears when the consumer has to make a choice between several leisure activities and when he ends up choosing a particular sporting event. The orientation of an individual for a sporting event can rely on many dimensions or modalities which form the content of the orientation, its qualitative aspect (Parsons, Shils, 1967; Hirschman, 1984, Laaksonen, 1987).

Therefore, a spectator may have an orientation for the sporting event because of the excitement or the pleasure it brings and an other may have the same orientation but for the relational and educational aspects gained from the experience. Nevertheless, the dimensions of the orientation should include all these modalities to allow the consumer to make a choice in harmony with his needs and values. Once these dimensions are established, it is important to know the strength of the inclination for the sporting event for an individual. The implication or the level of significance of particular aspects of the sporting event such as excitement, pleasure... are good indicators of the total intensity of the orientation for the sporting event for a consumer. After these reports about the orientation, it is now important to define the sporting leisures according their kind.

For a better vision of the many aspects of a phenomenon which represents 60 % of expenditures for companies specialised in marketing events, the sport will be first studied as a communication medium between individuals, allowing to develop values in a social group. Then, the consumption of sporting events will be considered as an emotional and sensorial experience. Finally, the sport will be analysed as a means to develop the knowledge of the consumers.

The sporting event: an elite leisure or a mass leisure.

In our society, the leisure consists in consuming free time, in making it profitable in order to fulfill our needs such as escape, rest or relaxation. Nevertheless, even if the leisure is effectively a means to spend time, it also has a distinctive value for the consumer (Veblen, 1978). Indeed, the leisure, still unevenly distributed among the consumers, stands as a selection and a cultural distinction factor (Baudrillard, 1970). By choosing his own leisure activity, which in fact is another way to spend his free time, the individual asserts himself and produces a social value. This social value results in a categorization of the individual. He, then, faces a structure of differentiation from a group or he joins an already existing group. Then, sport and the sporting event more specifically can be considered as leisure-witnesses of the social changes. The world
of sport appears to any newcomer as a wide range of choices between tradition levels, rules, values and symbols which gain a social meaning from the system they constitute. The consumer classifies himself in a group represented by his fellow individuals (Settle, Aldeck, Belch, 1979). Those groups with hermetic frontiers are the combined result of the economic capital available and, more important, of the group entry "fees" such as family tradition or early learning (Bourdieu, 1979). Therefore, it is important to present the possible distinctions existing between the different kind of sports. These differences can come from the variations of the perceived profits that a particular sport is supposed to bring. They also can be the result of the variations in terms of perceived "costs" (cultural, economic...) that a specific sport might lead to. In fact, the practice of a specific sport or the fact of attending a specific sporting event depend on the profits or the extrinsic or intrinsic costs for the individual, in the limits fixed by economic, free time and cultural capitals available (Bourdieu, 1979). The cultural capital (tradition and early learning) predispose the consumer to express all his differences. For the elite sports, the activity (practice or attendance) offers a forum for high social exchanges, whereas, mass sports have usually a "vulgar" connotation. To escape from "vulgar" entertainment, privileged persons have to preserve and affirm their distinction by avoiding the popular crowd and then show their disagreements.

In this study about the sport area, it is essential to clarify this distinction because the results will be affected by the sporting events selected and the way it is perceived by the fans (mass or elite). The values, then, attributed to different sporting events by the consumers are different according to the social group to which the consumer belongs (Tinsley, Barrett, Kass, 1977).

The sporting event: a show.

Nowadays, the sport reaches the status of a complete show because it offers many new features for the consumer such as escape, dream, feeling of belonging. At this point, marketing has a crucial role. It orients the consumer to the satisfaction of those new attributes by creating an artificial and parallel world where the image becomes the substance, the essence of everything (Baudrillard, 1987; Postman, 1985). Thus, the sporting event and its new attributes appear as the new reality for the consumer. This reality is defined as a hyperreality which underlines the will of consumers to build their own "reality", to simulate it (Baudrillard, 1983, 1987; Eco, 1986; Firat, Venkatesh, 1993). Marketing may be perceived as a support to the fragmentation of the sporting event by extracting it from its original context to clarify its different functions in a specific context (Eco, 1986; Kellner, 1989; Sherry, 1984). The sporting event might be perceived as the gathering of fragmented moments, as a range of products (violence, beautiful plays...), as a multitude of events bringing various and often contradictory feelings to the consumer. Therefore, it is necessary to understand the sporting event as a show in which the consumption becomes a symbolic act. Indeed, the objective differences between the consumer and the object vanish, the subject becomes also a product and he has to conform to the rules of the "market". In fact, the object and the subject are not longer separate (Hassan, 1987; Jameson, 1983). By choosing a sporting event, the consumer can feel himself as a product which attributes, chosen by the fan, can please to his fellow fans or not. He is a part of the product, of the consumption object. Then, the sporting event is a show because of the significance transmitted by the objects, by the emphasis on the instrumental functions of the product (Mc Cracken, 1988), giving birth to an aesthetisation of the consumption (Cova, Svanfeldt, 1993, 1995).
The sporting event: an hedonic activity.

The search of aesthetisation, of feelings, of emotions through sporting events present it as an hedonic activity, underlining the play and the experiential aspects of the consumption act (Hirschman, Holbrook, 1982). Usually, in the case of cultural products and services or leisure activities, the experience of consumption is the final goal. The main benefits expected during the consumption are the pleasure, the feelings and the emotions. The consumption of those goods and services assume an amount of time available and refer to a lifestyle. The alternatives considered by the consumers are other time-consuming activities (Cooper-Martin, 1991, 1992). Then, it is possible to assume that sporting events are high implication activities for the consumers. Laurent and Kapferrer (1985) define the importance of implication profiles for an individual. The personal interest for the category of product, the sign value attributed by the consumer to the product and the hedonic value of the product are the aspects which can contribute to create a durable implication for the consumer. This ability of the product to give pleasure is one of the main determinants of the hedonic value of a sporting event. This aspect allows the individual to escape from the reality during the consumption (Berlyne 1969, Stephenson, 1967). This hedonic approach is essential to understand the consumption of sporting events.

The sporting event: an activity allowing the knowledge development.

During the consumption of a sporting event, the spectator can also try to satisfy some needs of knowledge and understanding of the sporting events world. The "cognitive" individuals are people who appreciate to discover how the things are working and who wants to grow intellectually (Venkatraman, MacInnis, 1984; Venkatraman, Price, 1990; Nyeck, 1994). During a leisure activity as well as the attendance at a sporting event, the cognitive mastery appears as one of the most important aspects for a consumer to fully appreciate his occupation (Hawes, 1978). The evaluation of a sporting event by a consumer involves comparisons between what he sees and a full set of rules, histories, memories, records. Furthermore, the consumer has to improve his knowledge about the event in order to socialise, exchange with the others and finally to be able to appreciate the event using the same reference framework as the other spectators (Holt, 1995). This cognitive search can be underlined by the need of the spectator to identify himself with the actor. This identification usually allows the spectator to consider himself as an expert and then to affirm his mastery (Mullin, Hardy, Sutton, 1993). The sporting event is an experience of consumption which has the ability to satisfy specific needs of the consumer when he is in a particular context. The affective, cognitive and social integration (socialisation) dimensions constitute the different modalities the sporting event can offer. Therefore, it is logical to propose the following conceptual framework to define the orientation of an individual for a sporting event.

Figure 1. Conceptual framework: Dimensions of the Orientation for the sporting event
2. Propositions of the research and methodology

The conceptual framework leads to the idea that leisures tend generally to satisfy the search for sensations and emotions, the need for knowledge and the search for social integration (Nyeck and al, 1996; Bergadaa, Nyeck, 1995; Holt, 1995; Kantanen, 1993; Lacher, Mizerski, 1993; Hirschman, 1984). These cognitive, sensorial and socialisation needs are essential dimensions for the understanding of the sporting event consumer. The main objective of this research can be divided in two parts. The first one consists in developing a new scale to measure the consumer orientation for a sporting event (OSE) while keeping in mind the second one: verify the reliability and the validity of this instrument. The dimensionality of the measurement scale will be tested. The validity (convergent, discriminant and predictive) will be tested by including in our measures some existing scales or part of existing scales which are supposed to measure concepts close or opposite to those of the OSE scale (Synder, Fromkin, 1977).

P1: The existence of a three dimensions model acting as the determinant of the orientation of consumers for sporting events is postulated. These three dimensions constitute the construct.

P2: The measurement scale of the consumer orientation for sporting events (OSE) presents satisfying psychometric properties.

P3: The research will evaluate the validity of the OSE scale. To establish the construct validity of the OSE, the convergent and discriminant validities are evaluated (Campbell, 1960; Peter, 1981; Fornell, Larcker, 1981).

P4: The OSE scale presents a nomological validity (Nunnaly, 1978; Peter, Churchill, 1986; Steenkamp, Van Trijp, 1991). We can establish the network of relationships of the consumer orientation for sporting events with other constructs. Then, the measures of constructs such as the need for cognition (NFC, Petty, Caccioppo, 1982), the inclination to search new sensations and changes (CSI, Steenkamp, Baumgartner, 1992, 1995), the emotional search (PAD, Mehrabian,
Russell, 1974) and the external orientation of social preference (I-O, Kassarjian, 1962) should be significantly related to the OSE measures.

P4 (a) : The search for sensations dimension of the OSE scale is positively related to the emotional dimension measured by the PAD scale (Mehrabian, Russell, 1974) and is not strongly or not at all related with the cognitive need measured by the NFC scale (Petty, Caccioppo, 1982).

P4 (b) : The cognitive dimension of the OSE scale is positively related to the cognitive need measured by the NFC scale (Petty, Caccioppo, 1982) and is not strongly or not at all related with the emotional dimension measured by the PAD scale (Mehrabian, Russell, 1974).

P4 (c) : The search for sensations dimension is positively related to the consumer tendancy to search for new sensations and changes as measured by the CSI scale (Steenkamp, Baumgartner, 1992, 1995).

P4 (d) : The socialisation dimension of the OSE scale is positively related to the measure of the the external orientation of social preference measured by the I-O scale (Kassarjian, 1962).

P5 : In the case of the predictive validity, the consumer orientation for sporting events is significantly and positively correlated with the fact of buying goods related with the sporting events as well as with the amount of money dedicated to the sporting events.

Kantanen (1983) showed the intensity (frequency) of the attendance of a spectator to a show has an important influence on his global orientation. The frequent user becomes more demanding on specific aspects of the show. It is logical to assume that we can find this relationship in the context of the sporting event.

Hirschman (1984) states that consumers with emotional tendancy present a stronger inclination to consume other hedonic products, in fact products to experiment with pleasure. On the contrary, the cognitive consumers present a tendancy to have interest for more utilitarian products. This point is expressed by Holt (1995) who explins that the baseball consumer enjoys products in which he can find sensations, experiences. However, he adds that if the baseball consumer also buys products with his team signs such as hats or tee-shirts, then he buys an image more than an utilitarian aspect.

In this study, the confirmatory process used (Bollen, 1989; Gerbing, Anderson, 1988) is presented in the figure 2.

**Figure 2 Methodological process**
Study 1: Items generation and pretest

45 items have been generated from semi-directive interviews and discussions conducted among people involved in the sporting events field (fans, promoters of sporting events, marketing and sales people) and from the existing literature (Bearden, Netemeyer, Mobley, 1993; Unger, Kernan, 1983; Holbrook, 1982, 1986, 1990; Hawes, 1978, Holt, 1995...). The items presented under a likert 5-points scale were given to a six-person judgmental panel of experts. They had to indicate what dimension was, according to them, measured by the items they had just received. An item was retained, following an a-priori rule, if the six persons identified it as measuring the same dimension. The six dimensions were: the learning process, the escape, the pleasure, the expertise, the arousal and the socialisation. Each dimension had between 6 and 8 pre-supposed items.

The pretest has been conducted in a sample of graduate students in a large central canadian university (n=88). The craze for university sporting events is high and the students have easy access (prices and events) to sporting events on the campus. The questionnaires were administered at the sports activities building by the researchers to voluntary students.

Purification of the instrument

A principal components analysis was used to determine the structure of the instrument. Indeed, the exploratory analysis can be used to confirm whether the number of dimensions conceptualized can be verified empirically (Churchill, 1979). This optimal factorial structure was done by iterations: the elimination of "garbage" items was mainly made by examining the results of the exploratory factor analysis and the reliability analysis of the instrument. The determination of the number of factors underlying the construct was made by using the eigenvalue criterion with a limit of 1. The "Scree test" procedure was used to confirm the number of factors (Cattell, 1966). An oblic rotation was performed because the dimensions of the consumer orientation for sporting events are conceptually not independent (Cattell, 1978), the content of the factors was evaluated by checking the items loadings on those factors. Scale reduction was also performed by imposing stringent requirements on the loadings. This requirement on the relationship between items and the underlying factor that they are intended to measure was established at 0.5. Therefore, items should have high loadings on the factor they are supposed to belong to and low
ones on the other factors (Pedhazur, Schmelkin, 1991). Finally, the reliability of the instrument was evaluated by alpha of Cronbach coefficient (Nunnally, 1978).

Study 2 : Scale validation

The use of an exploratory factor analysis in the early stage of the research led to a purified 21 items OSE scale. This scale will be used for the factor analysis in the confirmatory stage of the research (Gerbing, Anderson, 1988). The questionnaire includes questions on behaviors and practices regarding the sporting event activities, on demographics categories of the respondents as well as on individual characteristics scales (usually short form) to estimate the validity of the COSE scale. We used 11 items of the need for cognition scale (NFC, Petty, Cacioppo, 1982; Petty, Cacioppo, Kao, 1984), 7 items (short form) of the inclination to search new sensations and changes CSI scale (Garlington, Shimota, 1964; Steenkamp, Baumgartner, 1992, 1995), the emotional response (PAD, Mehrabian, Russell, 1974, Haevlena, Holbrook, 1986) and 10 items of the social preference I-O scale (the external dimension)(Kassarjian, 1962). For the purpose of our study, all the scales used have been adapted to the 5-point likert model to fit with the COSE scale one. The items were translated and their meanings were checked with French and English speaking translators using a backtranslation procedure.

The sample

The questionnaires were administered to a sample of undergraduate students in the business school of the university. 240 questionnaires were completed and 234 were finally used for the study. The samples size is larger than 200 (Boomsma, 1987) and the 5 to 10 ratio of respondents to items of the larger construct is considered adequate (Peterson, 1982). Our sample respondents tended to be male (55.6%). The average age of sample respondents is 24.2 years with a standard deviation of 5.4 years. An exploratory factor analysis was performed on this new sample to check the adequacy of the results with those of the pretest. Iterations were made again to purify the instrument. Scale reduction conducted to a final instrument of 15 items used to perform the confirmatory analysis.

The data analysis

The confirmatory factor analysis was performed with the EQS software (Bentler, 1989). The estimation method used was maximum of likelihood (ML). Nevertheless, in case of non-normality of the data, EQS allows the use of ROBUST statistics to estimate parameters or fit indicators (Wothke, 1993) This option gives the estimation of Satorra and Bentler (1988) $\chi^2$ statistic and the ROBUST statistics errors which has been recalculated and corrected to assume the non normality of large samples. Therefore, the quality of the model is estimated by analysing these indicators.

3. Results

Study 1 : The pretest
Table 1 shows a summary of the first study results. The successive purifications of the principal components analysis conducted to the presence of 4 factors explaining 88.5% of the phenomenon variance. This number was determined using the Scree test and the eigenvalue criterion of 1 (Kaiser). The alpha coefficients are all above the 0.8 level and some of them are above the 0.9 point.

<table>
<thead>
<tr>
<th>Item n°</th>
<th>12</th>
<th>23</th>
<th>25</th>
<th>34</th>
<th>06</th>
<th>18</th>
<th>16</th>
<th>22</th>
<th>10</th>
<th>5</th>
<th>29</th>
<th>8</th>
<th>24</th>
<th>14</th>
<th>Cumulate Variance explained %</th>
<th>Meaning</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>.91</td>
<td>.91</td>
<td>.90</td>
<td>.89</td>
<td>.84</td>
<td>.80</td>
<td>49.9</td>
<td>Cognitive search</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 2</td>
<td>.92</td>
<td>.91</td>
<td>.90</td>
<td>.89</td>
<td>66.1</td>
<td>Social orientation</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factor 3</td>
<td>.92</td>
<td>.92</td>
<td>81.2</td>
<td>relaxation search</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Factor 4</td>
<td>.92</td>
<td>.90</td>
<td>88.5</td>
<td>Sensation search</td>
<td>.92</td>
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</tbody>
</table>

The most evident dimension is the cognitive one (factor 1 with 49.9% of the explained variance). This dimension includes items from both the learning and expertise dimensions presented in the conceptual framework. A focus on the other items regroupings shows the presence of two dimensions: the first one can be defined as the search for relaxation and the other one as measuring the search for sensations or emotions. The social orientation dimension is also really strong and its presence is undeniable. The results are not exactly what was expected after the conceptual presentation. They underline the complex aspect of sensorial or affective dimension and show the possibility of more than a single dimension to measure those aspects. This option is evaluated with the next and last pre-confirmatory analysis. The instrument includes 14 items kept after purification and 7 new ones. Indeed, for the next stage of the study, new items were added to preserve the balance between factors regarding the number of items in each dimension.

Study 2 : Scale Validity

Pre-confirmatory factor analysis

The scale was tested on the final sample to validate the factorial structure determined by the pretest and to check the quality of items added. This analysis should lead to a better choice of items to retain in the model to be subsequently evaluated during the confirmatory analysis. The results of this analysis in principal components after an oblimin rotation are presented in Table 2. Items were renamed according the dimension that they are supposed to measure. Loadings under |.4| were not entered. Three factors explain 75 % of the variance. This number of dimensions is confirmed by the Scree-test and the Kaiser criterion. This first test tends to confirm the presence of three dimensions in the measure of a consumer orientation for a sporting event: a social dimension, a cognitive dimension and a search for sensation dimension. The alpha coefficient easily meets the requirements (Nunnally, 1978). However, before launching the confirmatory
analysis process, it is important to keep only the "cleanest" items in the scale. Therefore, because of their relatively high loadings on more than one factor, some of the items are withdrawn. The final instrument tested in confirmatory analysis has 15 items (5 in each dimension)².

Table 2. Pre-confirmatory factor analysis

<table>
<thead>
<tr>
<th>Item n°</th>
<th>SE1</th>
<th>SE2</th>
<th>SE3</th>
<th>SE4</th>
<th>SE5</th>
<th>SO1</th>
<th>SO2</th>
<th>SO3</th>
<th>SO4</th>
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<th>CO2</th>
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<td>.81</td>
<td>.81</td>
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<td>.76</td>
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<td>45.6</td>
<td>Sensations search</td>
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</tr>
<tr>
<td>Factor 2</td>
<td>.90</td>
<td>.88</td>
<td>.86</td>
<td>.86</td>
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<td>.88</td>
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<td>.90</td>
<td>.88</td>
<td>.86</td>
<td>.86</td>
<td>.84</td>
<td>64.5</td>
<td>Social orientation</td>
<td>.95</td>
</tr>
<tr>
<td>Factor 3</td>
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<td>.87</td>
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<td>.84</td>
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<td>75.0</td>
<td>Cognitive search</td>
<td>.94</td>
</tr>
</tbody>
</table>

The confirmatory factor analysis

In univariate analysis of the data, no Kurtosis coefficient is above 1.5 (Byrne, 1994). Consequently, there is no evidence of univariate non normality of the data. Nevertheless, some items (SO1, SO3, CO4, CO5, SE5) show significantly high kurtosis values to correspond to a perfect normality. However, it is possible to infer that the data present only a slight multivariate non-normality which will not bear a strong influence on Maximum Likelihood estimations (ML). Indeed, Bentler (1992) suggests that a Mardia's estimate above 10 testifies to light multivariate non-normality of the data. Finally, the ROBUST statistics, which assume non normality of data, do not bring significant improvement to estimation of the model.

Dimensionality of the instrument

The three factor model was tested and the main indicators of the fit qualities of the model are presented in table 4. The estimates are given after each modification at the original model hence providing the opportunity to better judge the overall fit of the eventual model. Each modification is also justified. Next, the identification of the extreme cases which contribute most heavily to the Mardia's estimate (EQS Bentler, 1989) and their withdrawal allowed refinement of the multivariate normality of the data. Two other cases were eliminated because of their non contribution to the estimates homogeneity (models 1A and 1B).

The quality of the overall fit of the model was evaluated according to a set of criterions. The $\chi^2$ value, the $\chi^2/df$ (degree of freedom) value, the NFI and CFI³ indicators demonstrate fairly good fit

² For example, Items were : 
For Socialisation : SO2 Generally, I share my opinions about sporting events with other persons. 
SO5 I love talking about sports with people around me.

For Search for sensations SE2 Attending sporting events is a good way to relax.

For Cognitive search CO3 I consider myself as an experts of the sports I am interested in.
CO4 Regarding the sporting events field, we can say that I am ignorant.

³ NFI = ($\chi^2_0-\chi^2_k$) / $\chi^2_0$
CFI = $|((\chi^2_0 -df0) - (\chi^2_k -dfk)) / (\chi^2_0 -df0)|$
for the initial model. The $\chi^2$ to degrees of freedom ratios are each under 5, the first sign of an adequate model fit (Wheaton et al 1977). The 1B model presents a ratio close to 3, which constitutes a good value to judge the fit quality of a confirmatory model (Carmines et Mc Iver 1981). The values of the NFI and CFI indicators (Bentler et Bonnett 1980; Bentler 1990) were above 0.90. Therefore, given the size of the sample, they indicate a fairly good fit (Bentler, 1992). Finally, the number of iterations of the EQS program to converge to the solution is a good sign of the quality of fit of the model because it maintains a value under 10 (Byrne, 1994). The residual analysis also leads to the conclusion of good fit of the model. Indeed, the 0.13 average value for the off diagonal standardised residuals indicator is good even if not ideal and only 60% of the residuals are distributed between -1 and +1. This study of the highest normalised residuals suggests a problem related to the construction of the SE2 item.

Table 4. Results of the three factors model.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Model 1</th>
<th>M 1A</th>
<th>Final model 1B</th>
<th>Comp. Model C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalized Multivariate Kurtosis estimate (Mardia's)</td>
<td>14.85</td>
<td>13.44</td>
<td>12.64</td>
<td>12.64</td>
</tr>
<tr>
<td>Average off-diagonal value of standardised residuals</td>
<td>0.131</td>
<td>0.130</td>
<td>0.115</td>
<td>0.115</td>
</tr>
<tr>
<td>standardised residuals distribution</td>
<td>Fairly Good</td>
<td>Fairly Good</td>
<td>Fairly Good</td>
<td>Fairly Good</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>377.5</td>
<td>320.7</td>
<td>285.4</td>
<td>$\chi^2$ SB 258.6</td>
</tr>
<tr>
<td>Degrees of Freedom (Df)</td>
<td>88</td>
<td>86</td>
<td>85</td>
<td>85</td>
</tr>
<tr>
<td>$\chi^2$/df</td>
<td>4.29</td>
<td>3.72</td>
<td>3.35</td>
<td>3.04</td>
</tr>
<tr>
<td>NFI</td>
<td>0.89</td>
<td>0.91</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td>CFI</td>
<td>0.917</td>
<td>0.933</td>
<td>0.943</td>
<td>CFI* = .95</td>
</tr>
<tr>
<td>Number of iterations</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Respecification/precedent model</td>
<td>Original model</td>
<td>1 case withdrawn, free 2 covariances between errors (SO1 and SO2 and also SE1 and SE2).</td>
<td>1 case withdrawn, free item SE2 on factors SO and SE.</td>
<td>ROBUST estimation method.</td>
</tr>
</tbody>
</table>

After respecification⁴, the final **1B model** presents a better quality of fit. Also, the use of ROBUST statistics (**comparison model C**) allows a slight improvement of the model compared to the 1B model. Therefore, the light violation of the multivariate normality is not prejudicial to the final fit of the **1B model**. Consequently, the three dimensions structure of the OSE is established and proposition 1 is validated. The final model is represented in figure 3.

Figure 3. Final 3 factors model.

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⁴ During respecifications of 1A and 1B models, 2 covariances between error terms and SE2 item on socialisation factor have been freed. Acccording to Lagrange Multiplier (LM procedure), it is possible to identify parameters which could most contribute to a $\chi^2$ reduction (Byrne, 1994). Conceptually, the error terms measure the same concepts and a redundance phenomenon can appear, introducing a strong correlation between these error terms (Byrne, 1994). Also, SE2 item can be related to the socialisation factor, it can be interpreted as a measure of the search for sensations that we want to share, that we want to use to socialise.
Psychometric properties of the OSE scale

The OSE scale presents good psychometric properties. The alpha coefficients for the "search for sensations", "cognitive search" and "socialisation" dimensions are respectively 0.89, 0.94 et 0.96, and are each above the 0.70 criterion (Nunnally 1978). The factor-item correlation for a same dimension are all above 0.64. Finally, the t-values associated with the loadings estimates are all above 1.96, hence supporting the internal consistency of the scale (Gerbing et Anderson, 1988). Consequently, proposition 2 is validated.

Construct Validity of the scale.

Table 5 shows the evaluation of the construct validity for the OSE scale. Indeed, the average variances shared between the constructs and their measures (AVE) are each above 50%, thereby supporting the convergent validity of the scale (Fornell et Larcker 1981; Valette-Florence, 1988; Netemeyer, Durvasula, Lichtenstein, 1991). Also, the variance shared between the constructs is always lower than the AVE. The discriminant validity is therefore supported (Fornell et Lacker 1981; Valette-Florence 1988). The construct validity can be assumed and proposition 3 validated.
Nomological Validity

The nomological validity of the Orientation for Sporting Events is estimated by studying the correlation of its measures with measures from personality traits and behaviors as discussed in the propositions section. The correlations are presented in table 6. By considering the shape and the strength of the relationships between two criteria or predictors, the results lead to the validation of an existing network of relationships. The nomological validity of the Orientation for Sporting Events scale is then established (Cronbach et Meehl, 1955). From a compound index for each dimension of the OSE scale, strong and significant positive relationships are established between the search for sensations dimension of the OSE and the emotional dimension from the PAD scale, between the cognitive search of the OSE and the Need for Cognition of Petty and Caccioppo scale, and between the socialisation dimension of the OSE and the external dimension of the I-O Kassrjian's scale. Finally, the search for sensations dimension is positively and significantly related to the Change Seeking Index which is not the case for the two other dimensions. Indeed, the socialisation dimension has no theoretical relationship with the CSI index. However, some weak positive relationships can be established between the search for sensations dimension of the OSE scale and the Need for Cognition, and between the cognitive search of the OSE and the emotional dimension from the PAD scale. These relationships can be explained by the fact that they share some variance associated to the measurement method5. The correlations are significant and the expected direction, therefore the propositions 4 dealing with the Criterion Validity. The three dimensions are also related to the purchase of sports products, the predictive validity of the OSE can then also be assumed (proposition 5)

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5 All the instruments have been adapted to the Likert scales format.
4. Discussion and Conclusion

Sport in general and sport products have been ignored or have received very little consideration in the past. This research leads to the development of a valid scale to measure the Orientation for Sporting Events. In this respect, the subjective dimensions which determine the attitudes of the sporting events consumers are established (Cognitive search, search for sensations and socialisation). The results give support to qualitative research in the area (Holt, 1995) and extend results found in the field of leisure and in the consumption of hedonic products (Kantanen, 1993; Lacher, Mizerski, 1993; Unger, Kernan, 1983). Indeed, Holt (1995) presents four types of sport consumption experiences. Some of these types are confirmed in our study. Also, Unger and Kernan (1983) proposed an instrument oriented to the dimensions of leisure. The six dimensions found in the leisure area are not all found in the sporting event field which could be explained by the specific nature of the sporting event compared to general leisure. Nevertheless, the Unger and Kernan (1983) instrument served as a good basis once adapted to the sporting event field.

However, these results can not be considered as conclusive. This research should be extended to samples other than students. The student samples are not considered representative of the population Netemeyer et al, 1991). However, in the sporting events field, students represent an important segment of the consumers. To improve the validation of the OSE instrument, forthcoming research should focus on specific sports. Also, it may be advantageous to perform cross-cultural studies.

This research highlights the dimensions which determine the consumers orientation regarding the "Sporting Event" product. This product stands for more than 60% of expenditures of promotion and events marketing firms. Consequently, this study may identify segments or “tribes” of potential consumers differently than the classical demographic variables such as age or Salary. This segmentation of the potential sporting events potential customers may allow better allocation of companies resources allocated to promotion campaigns or choices of support. Thusly, their choices would be more aptly adapted to their target (Pope et Vogues 1997; Lardinoit 1997).
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