

Factors involved in Hungarian Sports Fans' Attendance and Merchandise-related Decisions

Anikó Kelemen-Erdős*, Regina Fekete**

* Óbuda University/Keleti Faculty of Business and Management, Budapest, Tavaszmező u. 15-17., H-1084 Hungary
kelemen.aniko@kgk.uni-obuda.hu

** University of Physical Education/Sportmanagement M.Sc., Budapest, Alkotás u. 44, H-1123 Hungary
regina.fekete91@gmail.com

Abstract: This paper describes the most prosperous area of the sports market: sports merchandising. Sports merchandising can be defined as a service or product application that relates to corporate design elements of a successful person and/or a club, with the aim of transferring its success and image, to the targeted company. The aim of this paper is to explore the motivational factors of sports site attendance and of sports-team-licensed merchandise purchases on the Hungarian market. The online survey was conducted using a quota-based sampling method. The result indicates price sensibility concerning on-site support. Among sports fans, football supporters are willing to buy sports-team-licensed merchandise - mainly jerseys and scarves. In the first section, the paper appraises the market for sports merchandise and the consumption habits relating to these products and introduces hypotheses. The second section assesses findings, limitations and further management-related opportunities.

Keywords: Sports marketing, sports-team-licensed merchandise, on-site fans

I. INTRODUCTION

Sports merchandising is one of the most rapidly emerging and prosperous areas of sports marketing, generating significant income for businesses worldwide. In 2015 the income of the sports market reached 20.07 billion US dollars [1] in spite of the fact that revenue from the black market in this area is also significant. The total annual income from the market will probably reach 90.9 billion US dollars by 2017 [2]. Using a rough estimate, sports merchandising may be responsible for 22% of the entire sports market [2]. Merchandising not only serves the business goals of organizations but also has a positive impact on the relationship between the audience and sportspeople because it increases their personal involvement in sports.

The aim of this study is to examine the consumption of sports merchandise in relation to on-site support through investigating consumer behavior. In this context, the paper highlights the interaction between on-the-spot fan support and willingness to buy sports-team merchandise. In addition to this, the research described in this paper explores supporters' preferences for fan-related products.

The first part of the study includes a literature review about sports marketing and merchandising and defines the hypotheses. In the section that follows, the results of empirical research which examined consumers' preferences for merchandise are described.

II. LITERATURE REVIEW

A. Factors Determining Attendance at Sporting Events

Sports marketing refers to the identification and satisfaction of sports consumers' needs and wants [3], thereby contributing to the development and/or promotion of sport and recreational activities. Sports marketing should focus on fans, which provide significant returns [4]. Sport fans are at some level engaged with a particular person or group, thus they can express feelings and sympathy with them. These emotions range in strength and the following levels of support can be differentiated: (1) fan; (2) fanatic; (3) fandom; and, (4) fanaticism [see 5]. On-site fans offer support at the venue of the sporting event. Accordingly, this research focuses on fan-related activities and preferences.

When there is a wide supporter base, income from sports products can be significant for the rights holders. The success of sportspeople may also have an influence on the success of the rights holder. Sportspeople may be motivated through use of performance-based rewards, but this cannot directly impact their ultimate results. Thus, achievement depends on athletes' determination, environmental and technical/technological circumstances, and even on referees.

The magnitude of sports-related consumption depends on the event (including factors such as its reputation, success, and the existence of any supplementary programs) and economic factors (such as related costs, but, above all, ticket price) [6]. Principally, internal motivators such as team success (which is not equal to team performance, and is one of the external factors in this framework [7]) determine attendance at sporting events, and due to this fact the main external hindering factor is ticket price, although weather and travelling distance to the event may also have an influence [7]. The cost of supporting sports performers, including travel costs, are important in the attendance-related decision making process [8]. However, it should be noted that although it may appear paradoxical that some free matches have empty grandstands, this can be explained by internal motivational factors - in these cases it is typically unsuccessful and unpopular teams who are playing, or free tickets are offered to potential spectators too late).

Furthermore, the appearance and attitudes of other supporters can affect other fans' perceptions too; a fact incorporated into the service marketing model [9]. The existence of opposing supporters may also have a detrimental impact on attendance [8].

The research described in this paper is designed to focus on the defining features of participation which is why the assumptions are founded on three main factors: economic (ticket price), environmental (weather conditions, travelling distance to an event) and the service experience (the team's current success, star players, facility atmosphere, staff readiness, and the defining parameter: the general experience of the match).

H1: The buying decisions and on-site attendance (vs. off-site/home viewing) of supporters are affected by the ticket price, weather conditions, the travelling distance to the event, the team's current success, the existence of star players, the atmosphere of the facility, staff readiness and match.

B. Willingness to Purchase Sports-Team-Licensed Merchandise

The corporate identity elements of star teams and sportsmen create a strong brand image. Sports merchandising refers to the conveyance of a message from this brand image to products. One of the main advantages of this association is that it can improve consumer judgment and attitudes towards other brands [10]. Moreover, it is the reason that sports consumers associate themselves with sportspeople (or with their teams), perfectly fitting the marketer's present-day goal of marketing to consumers who seek relationships and experience. Novel marketing models which place services and customers in a central position (such as service-dominant logic or customer-dominant logic) can explain customer attendance and consumer involvement [11].

Within the framework of merchandising, it is primarily jerseys, sports accessories, scarves, bags, caps, magazines, games (such as button football and electronic games) which are marketed. However, merchandise does not only refer to objects, but can also include services, people, organizations and places, or even concepts [12], including, for example, department stores, television channels (e.g. Barça TV) or programs. A sports brand can be associated with any product; not only common items of fandom but also other apparel or accessories such as smartphones or waistbands, and also sporting goods, bags, stationery, toys, decorative items and perfumes, and even fan-related groceries (e.g. Barcelona chips, Real Madrid coffee sugar, Fradi beer, Pölöskei Barcelona fruit syrup).

Supporters can express their identity, allegiances and membership through merchandise [13]. Thus consumption determines whether a fan's support is made visible to or experienced by others. Co-experience (shared presence, such as watching matches with friends), and on-site support in particular creates an intimate, rather sympathetic atmosphere which enhances group cohesion. This conformity can manifest in the ownership and purchase of sports merchandise. Football fans are essentially taking part in the entertainment industry, which also pertains to commercial relationships [14]. In accordance with the fact that supporters are willing to buy sports merchandise, especially on-site fans, the following hypotheses are defined.

H2: Fans are willing to buy their favorite teams' sports merchandise with team emblems.

H3: Supporters who attend games are more willing to buy sports merchandise.

From the rights holder's point of view, such merchandising fosters the acceptance of new products and shortens the period required for their introduction. The tactic can also be applied to brand expansion or extension. For rights holders, especially club owners, license and franchise agreements increase global market penetration [15, 16]. Ultimately, if the product does not live up to expectations – a cardinal risk – rights may be restored to the rights holder.

Attendance at football matches is driven by dedication and gender: it is mainly men who participate at team matches [8]. This kind of emotional drive encourages them to purchase sports team-licensed merchandise, a fact to which the following hypothesis refers:

H4: Football fans are more willing to purchase sports merchandise than other fans.

This piece of research describes the results of an analysis of market opportunities for sports marketing and management with an emphasis on sports merchandising and consumer preferences. It follows the presented theoretical framework and was undertaken by use of a consumer survey instrument.

III. RESEARCH METHOD AND SAMPLE

Based on secondary research the empirical investigation explores the characteristics of the consumer behavior of fans concerning sports-related consumption on the Hungarian sports market. The research design is depicted in Fig. 1.

Quantitative research was carried out within the framework of online questionnaires. The target population of the survey consisted of youth from age 18-29 who were deemed to be open to supporting sports and willing to purchase sports-team-licensed merchandise and to responding in an online format. However, the relevance of the fact that respondents belong to the 'y' generation (i.e. were born between 1980 and 1999) is noted. This demographic group is characterised by lower levels of personal contact, so the importance of sporting events which can act to bring them together is potentially elevated [17].

During the course of data collection, non-probability quota sampling techniques were applied, taking into account the demographic distribution according to census data from 2015 (Tab. 1). 191 questionnaires were collected.

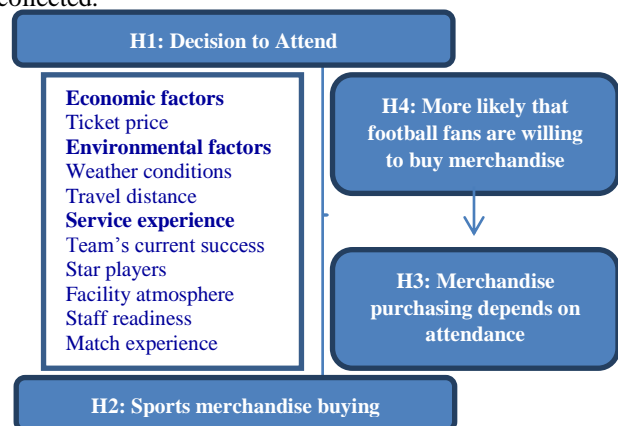


Figure 1. Research design
Source: Authors' own construction

TABLE 1. THE SAMPLE ACCORDING TO QUOTA BASED ON HUNGARIAN CENSUS DATA

Unit	Population distribution ^a		Sample size	Sample distribution	
	people	%	people	%	
Men	4.695.779	47.6%	81	47.4%	
Women	5.159.792	52.4%	90	52.6%	
All	9.855.571	100%	171	100%	

^aThe real census of 2011 is adjusted with births and deaths.

Source: Authors' own construction based on KSH [18]

Firstly, the sample was screened based on its accuracy and relevance, leaving 180 surveys. For the second time it was then scaled to Hungarian census data from 2015. Based on the census gender distribution (women 52.4%; men 47.6%), the latter responses were filtered out, so the surveyed sample comprised 52.6% (i.e. 90) women and 47.4% (i.e. 81) men: accordingly, the data refer to 171 respondents.

Because of the sampling method and limited sample size this research is not representative, but the findings may justify further investigation and reveal novel research opportunities.

IV. RESULTS

Preliminary analysis of the sample indicates the limitations of the research. The database does not permit complex mathematical and statistical analyses, although attempts were made. However, simple multivariate analyses were undertaken as part of hypothesis testing. Data were evaluated using the SPSS Statistics 19 software package.

As stated in H1, on-site supporters are mainly influenced by the ticket price, travelling distance to events, staff readiness, their team's current success, facility atmosphere, match experience, weather conditions and existence of star players. In this context, the determining factors (the key explanatory variables) were examined, including the ticket price, the travelling distance, weather conditions, match experience, or rather the atmosphere of the facility, staff readiness, and the team's success and the presence of star players.

Multicollinearity of variables was monitored by application of multivariate linear regression analysis during which the reference value of five (VIF>5) was exceeded by match experience and facility atmosphere, which were thus excluded. The remaining valid values are depicted in Tab. 2. Findings of greater than two indicate strong multicollinearity (e.g. ticket price and travelling distance) and thus should be treated with caution. In addition, the variables weather and the appearance of star

players were not built into the model because they were not found to be significant in linear regression analysis. The explanatory value (adjusted R²) of the model is 0.693.

Significant T-test findings (p<0.05) indicate the suitability of the model factors. The model indicates that support on the sports field is affected by ticket price, although not significantly. The results of the survey also indicate that travelling distance is an important factor, so holding matches in more locations, thereby increasing travelling convenience, may impact sales. Further research could extend the hypothesis using other potential determinants of the service experience such as the role and co-creation opportunities of supporters.

In the following section we examine the purchasing-related factors involved in the success of sports merchandising. The aim of sports organizations is to satisfy the wants and needs of fans, thereby generating a significant source of revenue.

H2 addresses whether fans are willing to buy their favourite teams' sports merchandise with team trademarks and/or logos. 60.2% of respondents (103 people) have already bought one or more of their favourite team products so the second hypotheses is supported [19]. The survey mainly addressed respondents about their site-related products based on an assessment of willingness-to-buy. Respondents principally purchase jerseys (96 people) and scarves (72 people) [19]. According to this research, the key element of consumer choice is quality (89 people) and, secondly, design (72 people), while price (67 people) plays only a tertiary role [19].

H3 is related to consumer choice factors and the proposition that on-site fans are more likely to buy merchandise. This assumption is based on the evident proposition that the consumption of products depends on their potential use, a situation which significantly influences customer and consumer behavior. Of considerable importance in this purchasing decision is the visibility of the purchased item to others: sports merchandise typically fosters personality identification or contributes to the individual's desire, through signaling, to belong to a group.

To examine the relationship between two variables, cross-tabulation analysis was performed (Tab. 3). This form of analysis should be carried out only if the number of cells exceeds the sample size of ten [20]. One sample cell included seven, suggesting that the results are of limited validity. Because of the low cell frequency the analysis was not sophisticated or worth supplementing with further factors.

TABLE 2. MULTIVARIATE LINEAR REGRESSION MODEL COEFFICIENTS

Model	Non-standardized		Standardized	T-test	α	Collinearity	
	coefficient	Standard error	Beta			Tolerance	VIF
Constant	1.789	.034		53.210	.000		
Ticket price	-.038	.017	-.162	-2.284	.024	.357	2.798
Travelling distance	-.078	.015	-.355	-5.148	.000	.381	2.627
Staff readiness	-.083	.016	-.301	-5.305	.000	.560	1.787
Team's current success	-.046	.017	-.167	-2.780	.006	.501	1.997

Dependent variable: Visiting sport events.

Source: Authors' own construction

TABLE 3. RELATIONSHIP BETWEEN ATTENDANCE AT MATCHES AND PURCHASES OF SPORTS MERCHANDISE

On-site support	Fans have merchandise		
	Yes	No	All
Yes	96	36	132
No	7	32	39
All	103	68	171

Source: Authors' own construction, N=171

A Pearson's chi-square test indicates a significant relationship between the variables ($\chi^2(1) = 37.715$, $p < 0.05$). Based on Cramer's association coefficient, the association is moderately strong ($V = 0.470$). Accordingly, there exists a relationship between on-site support and the purchase of sports-related products, so the third hypothesis should not be rejected.

H4, which refers to the correlation between football fans and the frequency of purchase of sports merchandise, was also examined using cross-tabulation. Table 4. displays the findings.

The results indicate that football fans are more likely to buy sports-team merchandise ($\chi^2(1) = 26.138$, $p < 0.05$; $V = 0.391$) than other sports fans, even if this relationship is relatively weak.

TABLE 4. CORRELATION BETWEEN FOOTBALL FANS AND OWNING MERCHANDISE

On-site support	Fans have merchandise		
	Yes	No	All
Yes	96	36	132
No	7	32	39
All	103	68	171

Source: Authors' own construction, N=171

The tested hypotheses are indicated based on the measured variables in Fig. 2. The potential for their application is highlighted in the conclusion.

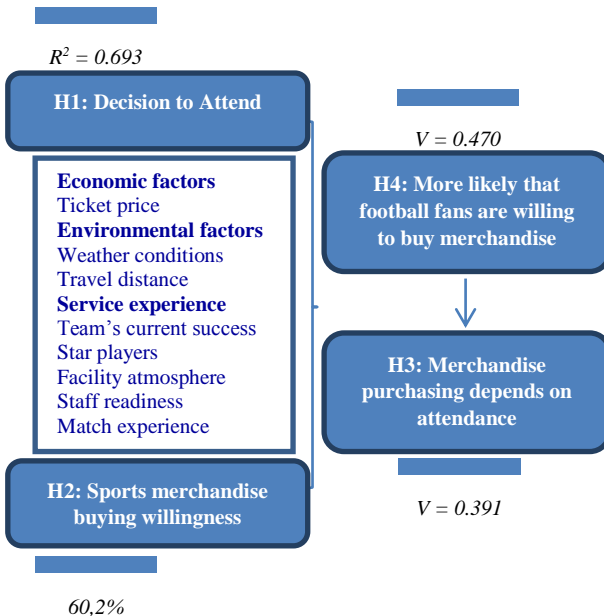


Figure 2. Results based on the hypotheses
Source: Authors' own construction

V. LIMITATIONS OF THE RESEARCH

Limitations related to the methodology which was applied are described in the previous chapter. In addition to the above-described topics, an attempt was made to segment the customer groups in various ways, including differentiating between those who buy sports merchandise and those who do not, and to take into account their distinctive features. Among other variables, product preferences, visits to sporting competitions, the viewing location of the broadcasting and other personal characteristics were considered.

Cluster analysis of the consumer groups would have enabled better segmentation of those who buy sports merchandise. However, as the sample contained a significant number of outliers, screening was necessary. As a result of this process, a significant portion of the sample was filtered out, decreasing the validity and reliability of the final results.

Despite the limitations of the cluster analysis, discriminant analysis was attempted so as to determine clusters. The sample was composed of both analytical and evaluation control samples according to the characteristics of selected features in order to ensure research validity. However, the results reveal only a few significant relationships (such as the fact that sports consumers mainly prefer scarves, in contrast to the previous findings of this study). In interpreting the findings, it is not a negligible problem that the explanatory power of the model and the accuracy of the classified cases was in some cases greater than 30% and, in more cases, 50% or more. The estimated results are thus not able to capture the relationships effectively, although they do permit some inferences to be made.

Multi-group discriminant analysis was applied to verify that home fans, as well as occasional and regular on-site fans, could be distinguished regarding their consumption of sports-team-licensed merchandise. This analysis also proved largely invalid because the proportion of non-respondents was, at 23%, very high, so that the restricted sample size limited the effectiveness of the evaluation considerably.

Despite the issues with the analysis, both the above-described relationships may serve as the basis for further research. The approaches, the identification of the characteristics of support-related products, and greater knowledge about the relationship between the venues and sales of sports merchandise can improve, through segmenting and targeting, the marketing strategy for the sports merchandise market.

VI. CONCLUDING REMARKS

The market for sports merchandise is significant and demand is affected by consumption; especially important is the visibility of products to outside observers. Consumption characteristics are dependent on the supporting venue. In the case of on-site fans, consumption is influenced by the ticket price, the service experience of the fans, team success, and staff readiness. On-site football fans are more willing to buy sports merchandise than other fans, probably because their emotional involvement is higher.

In spite of the diversity of sports-team-licensed merchandise, customers are willing to buy sports jerseys, and sometimes scarves.

One managerial implication is that supporters are price sensitive about the decision to attend sports events so ticket prices should be defined with caution. Merchandise companies should emphasize the design and sale of jerseys and scarves to fans who attend matches, especially in the case of football supporters.

It would be worthwhile performing a comprehensive study analyzing the additional determinants of willingness to purchase sports merchandise. In addition, segmentation of the consumers of sports merchandise, the preference of sports consumers and further research that explores attitudes and consumer satisfaction variables, would contribute to the establishment of a better-targeted market strategy.

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