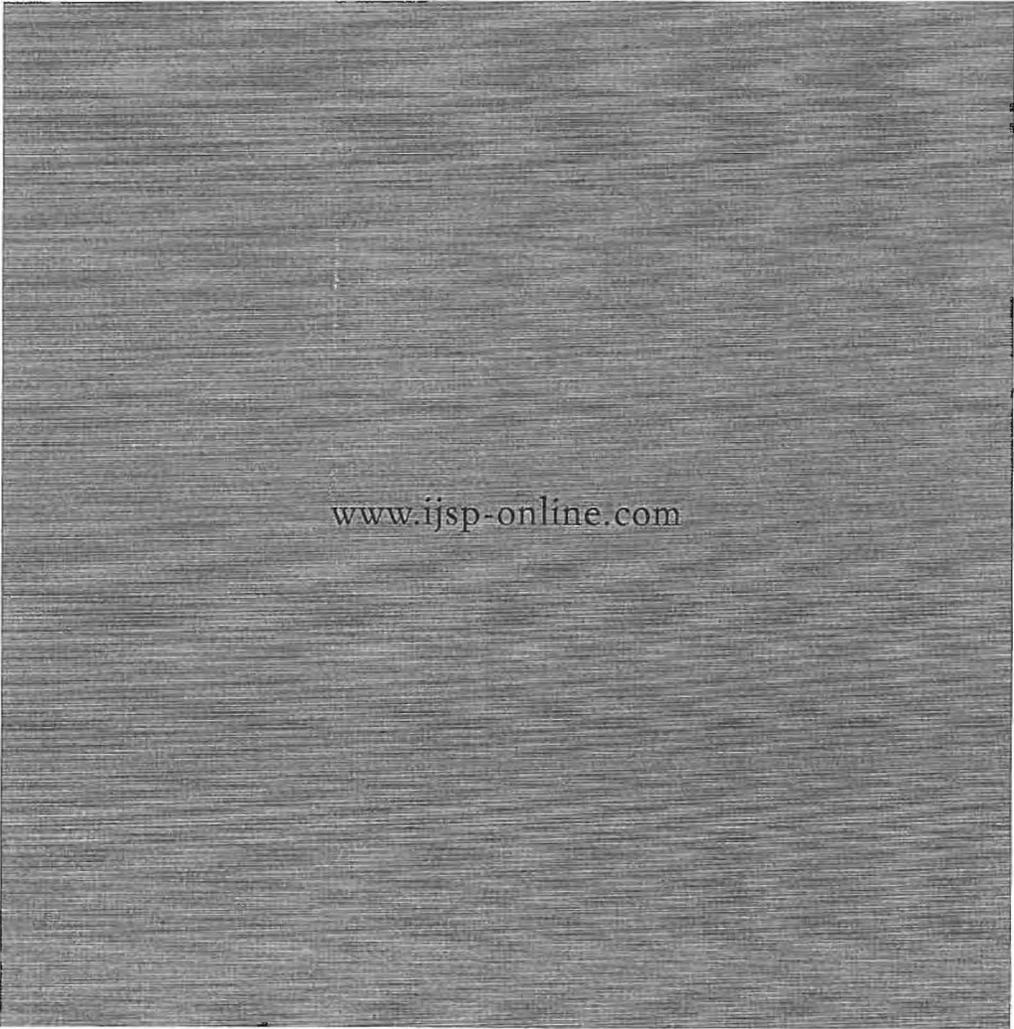


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## Assessing fan motivation in a Greek population; the psychometric evaluation of SPEED

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*The present study aimed to examine the applicability of the SPEED scale in the context of fans of the professional football clubs in Greece and examine its predictive power on fans behavioral intention to continue attending the team's games. The proposed by Funk, Filo, Beaton and Pritchard (2009) five-dimensional motivation model used: a) Socialization, b) Performance, c) Excitement, d) Esteem and e) Diversion and ten items, two for each of the motivation facets. Two hundred and thirty nine (N=239) fans of professional soccer league participated in this study. The surveyors randomly selected sections in the venue and approached spectators at their seats before the beginning of the game. The 10 item SPEED scale was used to measure motivation by using the two items of each sub-scale randomly placed. The scale was translated into Greek using the back to back translation procedure. A single item measure was used to rate the fans' intention to attend future games. A confirmatory factor analysis (CFA) did not provided support for the factorial validity of the motivational model. The data were then analyzed with an exploratory factor analysis and internal consistency through Cronbach alpha. A subsequent confirmatory factor analysis (CFA) provided partial support for the factorial validity of the model. Esteem had a strong influence on intention to continue attending the team's games. The present study was the first attempt to distribute the SPEED scale to other population than Australian fans, in other geographical region than Australia and to non-English speaking spectators attending a football game in Greece. The theoretical and practical implications of these results are discussed*

KEY WORDS: Attendance, Football (soccer), Questionnaire.

### Introduction

Sport marketers have always been concerned with increasing attendance at games and building loyal, identified fans since they have little or no influence over on-field team performance. It is truly important for them to under-

stand the process of how a sport team provides a mechanism to convey individual characteristics and uniqueness to others (Wann & Branscombe, 1990). Discerning and recording sport fans' motives and thus predicting their behavior is more than important for sport marketers (Hunt, Bristol & Bashaw, 1999) as their understanding was till recently limited and mostly tended to concentrate on team performance as the primary determinant of fan behavior (Wann & Dolan, 1994; Wann, Tucker & Schrader, 1996).

For sport teams having loyal, die-hard fans seems very important as those fans tend to resist to the temptation to switch to "more successful" teams during a losing season or adopt a new "favorite" player when their current favorite's performance is falling (Neal & Funk, 2006). Moreover, the attendance to the team's games generates the revenue from ticket sales and helps attract other team revenue sources such as sponsorship, advertising and media rights (Neal & Funk, 2006). According to Zhang, Smith, Pease and Mahar (1996), in some teams the income generated from team attendance of games may reach the 75% of their overall revenue, though; worldwide economic crisis has not looked kindly upon clubs who have over-committed themselves. There exists a realization amongst stakeholders that football clubs need to be run as solvent trading companies and the only way to retain that privileged and protected position in society is the support of their loyal fans (Ellen, 2010). For most teams a fan is not just a spectator; is a psychological bond to the team or to a player (Wann, 1995; Wann & Branscombe, 1990; 1993). In general, sporting events increasingly constitute a social theatre within which individuals play a public role (Bouchet, Bodet, Bernache-Assollanti & Kada, 2011).

In order for a team to remain competitive and profitable, its marketing managers should try to better understand their consumers in order to offer them superior value. Although fans motivation has been studied extensively in the context of sports in general (Funk, Beaton & Alexandris, 2012; Funk et al., 2009; Funk, Mahony, Nakazawa & Hirakawa, 2001; Wann et al., 1996 and others), the applicability of the motivation models proposed in different cultures is limited. This study aimed to provide such insights to Greek professional football (soccer) marketers. Although discussions are made about the popularity of football in Greece (Theodorakis & Alexandris, 2008), the current study is the only scientific attempt trying to assess the fans' motives as long as their intention to continue attending the team's games.

According to Ryan and Deci (2000), to be motivated means to be moved in order to do something. People have different kinds of motivation, meaning that they vary not only in level (i.e. how much motivation) but also in the orientation of motivation (i.e. the underlying attitudes and goals that give rise to

an action). In Self-Determination Theory (SDT), Deci and Ryan (1985) distinguished the different kinds of motivation based on the different reasons or goals that give rise to an action. The most basic distinction was between intrinsic and extrinsic motivation. Intrinsic motivation refers to doing something because it is inherently interesting or enjoyable while extrinsic motivation refers to acting somehow in order to achieve a separable outcome. According to Funk and his cooperates (2012) intrinsic motivation reflects an autonomy orientation that involves regulating behavior based on interests, self-endorsed values and ego enhancement. Extrinsic motivation represents a control orientation that directs how one regulates behavior based on feelings of stress, tension and public interaction. Together, autonomy and control motivational orientation regulate the type and frequency of sport consumption activities.

The experience of fandom serves to satisfy key underlying motives (Wann et al., 1996) either through directly experiencing (i.e. music, sport or art) or through the social identity (Tajfel & Turner, 1979) gained from the role. The growing body of literature, especially in sport consumer behavior, provides a number of beneficial scales to measure motives for attending sport events. In general, understanding the fan/consumer and what motivates him or her in order to consume a sport product is essential in order to successfully create and deliver the sport product (Funk et al., 2001).

Individuals are motivated to form a psychological connection with a sport team and are engaged to particular behaviors in order to satisfy various dispositional needs (Funk & James, 2004). For example, becoming a fan of a team may satisfy an individual's need for belonging and provide opportunities for social interaction. The research in leisure activity has showed that motives are dynamic and are changing throughout a consumer's lifetime (Beaton & Funk, 2008). Such changes have been also found in spectator sport (Funk & James, 2006). Comparative studies have revealed that motives may vary by country, sport and emotional attachment (Wann, Grieve, Zapalac & Pease, 2008; Won & Kitamura, 2007; Koo & Hardin, 2008). All the above reasons along with the emerging importance of understanding sport consumers' motivation, contributed to the development of many different instruments investigating sport event attendance.

Wann (1995) has developed the Sports Fan Motivation Scale (SFMS) consisting of eight motive categories (eustress, self-esteem, escape, entertainment, economic factors, group affiliation and family needs). Milne and McDonald (1999) suggested the Motivations of the Sport Consumer (MSC), which includes 12 motivation factors (stress release, skill mastery, aesthetics, self-esteem, self-actualization, value development, social facilitation, affiliation, achievement, risk-taking, aggression and competition). Both the above

scales were questioned for their validity and reliability by Trail and James (2001) who developed the Motivation Scale for Sport Consumption (MSSC), which consisted nine motivation constructs: achievement, knowledge, aesthetics, drama, escape, family, physical attraction, physical skills and social opportunities.

One of the most widely accepted instruments today to measure fans' motivation in professional sport events has been developed by Funk and his colleagues (2001) who created a 30-item Sport Interest Inventory (SII), which assessed ten potential motives of spectators attending Women's World Cup in the United States. On 2002, Funk Mahony and Ridinger extended the SII to 14 possible motivational factors: drama, vicarious achievement, aesthetics, interest in team, interest in player, interest in soccer, national pride, excitement, social opportunities, support for women's opportunities, players as role models, entertainment value, bonding with family and wholesome environment. Those factors were then extended to 18 on a new study conducted by the researchers (Funk, Ridinger & Moorman, 2004).

Most of the aforementioned scales contained too many factors (7-18) with too many items (21 to 48 or more) which, according to the literature review, finally explained 20% to 40% of the variance in spectator support level. Moreover, most of the above mentioned tools were often perceived as burdensome and complex by practitioners –especially when having to fill them in before or during a sporting event. In order to meet the research demands of both practitioners and academics, Funk, Filo, Beaton and Pritschard (2009) made an attempt to provide a parsimonious measurement tool capable of providing guidance to both academics and practitioners for sport event attendance behavior. The specific measurement includes five facets of motivation: **S**ocialization, **P**erformance, **E**xcitement, **E**steem and **D**iversion (SPEED), expressed through ten items. Its themes represented a convergence of constructs from previous instruments and reflected the core motivational facets that drive individuals to seek out sport experience to satisfy needs and receive benefits (Funk et al., 2009). The major thrust of this model was that these five facets of motivation lead to intentions to re-attend the sport event. This model has not however been empirically tested so far. Additionally, while the relationship of fans' motivation with behavioral intentions is well investigated in the sport service literature, it has not been examined in different cultures.

Of course, the potential theoretical overlap among the five facets seems very possible while the reduction of the constructs and its items probably leads to the loss of specific information. In spite of these disadvantages and according to its creators (Funk et al., 2009) the SPEED scale seems to pro-

vide a parsimonious measurement tool of motives to explain what benefits spectators with prior direct attendance when attending a team's games. In general, the SPEED scale was found to be reliable and valid, relatively concise, facilitating its implementation by practitioners, while effectively representing sport event attendance motives uncovered through existing academic research (Funk et al., 2009). The short yet comprehensive number of variables enables data collection even in game conditions. Furthermore, due to its limited size, it facilitates data collection of other parameters (i.e. identification, involvement, loyalty, etc) that contribute to a better understanding of fan behavior without tiring the respondents.

As previously noted research for the applicability of the fans' motivation scale in different cultures is still limited. One of the areas that we believe holds particular theoretical and practical importance relates to the improvement of fans' experience and the development of a loyal fans' base. There has been evidence in the context of sport events that motivation plays an important role on fans' intention to re-attend an event.

The present study aimed to test the applicability of a fans' motivation scale (SPEED) and its predictive efficacy in re-attending the team's games. Three were the hypothesis that drove the researchers; first, that the five-factor structure of the scale would be validated using a Greek sample of fans. Secondly, that all factors positively motivate Greek fans when attending their teams' games. Thirdly, that the SPEED factors would predict the fans' intention to attend the team's future games.

## **Hypotheses**

First, it was hypothesized that the (five)-factor structures of the SPEED scale would be validated using a sample of Greek professional soccer fans. Secondly, we hypothesized that the SPEED scale would be predictive of fans intention to re-attend their teams' games.

## **Method**

### **PARTICIPANTS**

A total of 320 subjects were approached, 286 of whom agreed to participate in the study for a response rate of 89.4%. Of the survey's, 47 questionnaires were found to be incomplete or had obvious acquiescence bias and were discarded resulting in 239 usable questionnaires and reducing the response rate to 74.7%. Sample's demographics are analytically presented in Table I.

TABLE I  
*Sample's Demographics*

Variable	Value label	Value (%)
Sex	Men	86.6
	Women	11.7
Age	< 19	12.1
	20-29	52.7
	30-39	23.8
	40-49	2.9
	≥ 50	--
Profession	Pupil/student	45.2
	Public servant	11.3
	Private sector employee/Labourer	16.7
	Business owner	6.7
	Free-lancer	14.6
	Unemployed	1.3
Education	Elementary	1.3
	Secondary (high school/lyceum)	61.1
	Higher (bachelor's degree)	32.7
	Master's degree/Doctorate	3
Marital status	Married	15.5
	Unmarried	75.7
	Divorced/window	2.1
	Living with a companion	4.3
Having kids	Yes	14.6
	No	82.8
Total month income	≤ 500	16.7
	501 - 700 €	11.3
	701 - 1000 €	30.5
	1001 - 1300 €	22.6
	1301 - 1700 €	4.2
	1701 - 2000 €	4.6
	≥ 2001	6.3

## PROCEDURES

As the representativeness of the sample was not a priority of the research, a non-probability sampling method was used with a convenience sampling. The data were collected on February of the 2010-2011 Professional Greek Soccer League (Super League), during one game. The questionnaire was distributed to males and females, aged 12 years and older. The surveyors randomly selected sections in the venue and approached spectators at their seats before the beginning of the game. Efforts were made to include a representation of the people sitting in each section and no more than two persons per party were given the questionnaire. There was no area designating for the visiting team's fans in the installation. Participation to the survey was voluntary and those who chose not to participate were replaced. Respondents needed approximately 6-8 minutes to complete the questionnaire.

## MEASURES

*Motivation.* The 10 item SPEED scale was used to measure motivation by using the two items of each sub-scale randomly placed and answered through a seven-point Likert type scale, anchored with 1: strongly disagree, to 7: strongly agree. The present study is the first attempt to distribute the SPEED scale to other population than Australian fans, in other geographical region than Australia and to non-English speaking spectators attending a football game in Greece. Although there was nothing to suggest that the SPEED model would not fit the gathered data in Greece, cultural and sport differences were a concern for the researchers. In line with Vallerand (1989), to translate the SPEED scale, the back to back translation technique was used (see *Analysis*).

*Intention.* A single item measure was used to rate the fans intention to attend future games. Responses were provided on a scale ranging from 1 ("There is no chance to attend any future game") to 7 ("I will absolutely attend future games of my team").

## ANALYSIS

Procedures in the EQS (Bentler, 1995) and the Statistical Package for Social Sciences (SPSS 16.0) were utilized to analyze the data. In order for the assumptions of the factor analysis to be met, the original data were transformed from a seven-point to a five-point Likert type scale, anchored with 1: strongly disagree, to 5: strongly agree.

*Scale Translation.* To translate and validate the SPEED scale into Greek a typical methodology was followed (Banville, Desrosiers, and Genet-Volet, 2000; Theodorakis, Wann, Carvalho & Sarmiento, 2010; Vallerand, 1989; and others). The SPEED scale was first translated into Greek using the back to back procedure (Vallerand, 1989). Two of the authors translated the original SPEED into Greek and afterwards compared the two versions. Six of the ten items were translated in an identical way. For the remaining four, a discussion between the authors was conducted and its meaning was judged to be identical, despite the use of different words. In each case, the translators came to an agreement to keep one of the two statements which seemed to be the more appropriate according to the vocabulary used, the meaning, the grammar and syntax. The Greek version was then given to two other bilingual researchers, with similar academic backgrounds in the field of sport, who agreed to translate the items back into English. Neither of the two researchers have ever used or knew the SPEED scale. After the translation was accomplished, the four researchers evaluated the back-translated versions with the original SPEED. While most of the statements (6 out of 10) were not identical to those of the original scale, the researchers agreed that their meaning was the same. For this reason they resulted in the retention of the translated Greek scale.

In order to check the content validity of the translated scale, a pilot study was conducted in 50 students of a Department of Physical Education and Sport in Northern Greece, with characteristics similar to those of the target population. All of them declared fans and spectators of certain Greek sport teams. These individuals were asked to provide feedback on the translated scale. First, they were instructed to fill in the questionnaire, and second to indicate any words or sentences that they did not understand or they thought that required adjustment. Among those participants, 48 of them reported difficulty in understanding the variable "I get a sense of achievement when the team wins". The item was modified and a qualified Greek-lan-

guage teacher reviewed the translated version to ensure the appropriate language and comprehensiveness, and to avoid any grammar or syntax mistakes. The final version was distributed to 30 other students. None of the respondents reported any difficulty in understanding and completing the questionnaire.

In order to examine the content validity of the translated scale, all four committee members at the same time analyzed the original and the translated scales, examining whether each translated item and its corresponding original one were identical in meaning. This examination concluded that the content validity of the translated version was proper.

The concurrent validity of the translated scale was examined through the distribution of both the original and the translated scale to 40 bilingual University students—others than the ones that participated in the pilot study. Before answering both versions of the scale, the participants' ability to understand, read, write and speak English was assessed using a four-item scale developed by Vallerand and Halliwell (1983). All participants, showed a more than moderate ability in the English language and so they were asked to answer both versions of the SPEED scale. Half of the sample completed the Greek version first, and the other half, the English one, to avoid order bias. One month later they repeated the process by answering both versions in opposite order. Pearson's product moment correlation was computed to observe the relation between the original and the translated version, revealing a high coefficient ( $r = .82$ ), indicating high concurrent validity of the translated SPEED scale.

*Factor Structure and Reliability:* To examine the factorial validity of the translated into Greek SPEED scale, a confirmatory factor analysis was performed (Bentler, 1995). The purpose of the CFA was to confirm the factor structure of the five-factor 10-item SPEED scale. Because the item results were only slightly skewed, the maximum likelihood (ML) estimation was used in conducting the CFA (Lam, Zhang & Jensen, 2005). Extensive research on the robustness of the ML method indicates that this method is almost always acceptable, even when data are not normally distributed (Lam et al., 2005; Tanaka & Bentler, 1985). This extensive review also led the authors to the conclusion that there is no clear consensus regarding an "acceptable" degree of non-normality when dealing with confirmatory analysis. Studies examining the impact of univariate normality on ML-based results suggest that problems may occur when univariate skewness and kurtosis approach values of 2 and 7 respectively (eg. Curran, West & Finch, 1996; Muthen & Kaplan, 1992). In this line, West, Finch and Curran (1995) referred to kurtosis as a greater concern than skewness, and recommended attention if skewness is greater than 2 and kurtosis greater than 7. Moreover, there seems to be no generally accepted cut-off value of multivariate kurtosis that indicates non-normality. A guideline of EQS (Bentler, 2006) suggests that data associated with the value of Mardia's normalized multivariate kurtosis greater than 3 could produce inaccurate results when used with ML estimation.

Model fit was examined based on several indices, including the Non-normed Fit Index (NNFI), the Comparative Fit Index (CFI), the Standardized Root Mean Residual (SRMR) and the Root Mean Squared Error of Approximation (RMSEA) accompanied by the confidence interval (90% CI). NNFI and CFI values less than 0.90 do not indicate a good fit of the model to the data, while values greater than 0.95 show an excellent fit (Hu & Bentler, 1999). Values of the RMSEA less than .05 indicate a very good fit, and values up to .08 indicate reasonable errors of approximation in the population (Byrne, 2000; Lam et al., 2005; Steiger, 1990). McCallum and his colleagues (1996) also declared that the values of the RMSEA between .08 and .10 indicate a mediocre fit and those greater than .10 indicate poor fit. On the other hand, the SRMR values which are close to 0.08 shows a rather good fit of the model to the gathered data (Hu & Bentler, 1999).

The reliability was measured with Cronbach's alpha.

*Assessment of motivation:* Descriptive statistics was used in order to evaluate the fans' motives when attending a game.

*Relation among the motivational factors and intention to attend future games:* was examined by regressing the fans' intention on to indices constructed from the factor analyses.

## Results

### FACTOR STRUCTURE

*Confirmatory Factor Analysis:* was first used to examine the hypothesized five factor structure of the initial SPEED scale. Each of the ten items was allowed to load only on its hypothesized factor (according to Funk et al., 2009) and all of the cross-loadings were set to zero. Factor variances were fixed to unity and error terms were not permitted to correlate. The SPEED items' skewness ranged from -1.93 to -0.91, while the kurtosis values ranged from -.29 to 5.39 (Table 2). The Mardia's (1970) coefficient of multivariate kurtosis was .95, indicating multivariate normality as it was lower than the cutoff point of 120 (120 results from the rule  $p(p+2)$ , where  $p$  is the number of the observed variables). The value of the normalized index of multivariate kurtosis (Normalized estimate = 43.25) showed deviation from the normal distribution (when greater than 5 indicates non-normal distribution) (Byrne, 1994).

The model's fit indices showed an unsatisfactory adaptation of the data collected from the Greek fans. More specifically, it emerged that:  $\chi^2 = 383.37$ ,  $df = 30$ ,  $p < .001$ , NNFI = .416, CFI = .611, SRMR = .214, SRMSEA = .224 and RMSEA 90% CI = .204 -.244. These results combined with the relatively low loadings of the items to the initial SPEED factors led to the rejection of the first research hypothesis. Skewness and kurtosis values of three variables came to be quite a concern (*motive3*, *motive5* and *motive9*). For this reason, these three variables were removed from the data and, an Exploratory Factor Analysis was then performed to unearth underlying dimensions (Vlachopoulos, Theodorakis, & Kyle, 2008).

*Exploratory Factor Analysis:* through SPSS 16.0 was performed in order to examine the underlying factor structure of the transformed SPEED items. The oblimin rotation method was first used to allow the factors' inter-correlations. As two of the three factors that emerged showed low correlation (Stevens, 1996), the Varimax rotation was then used. The decision making process in the determination of extraction and rotation methods, the number

TABLE II  
 Descriptive Statistics And Confirmatory Factor Analysis Results Of Translated SPEED Items  
 "When Attending My Team's Games..."

Item	M	SD	Skewness	Kurtosis	Factor loading	Error term	Item variance explained (%)
Motive 1 <i>I have the chance to socialize with others</i>	4.16	0.94	-1.29	1.58	<u>Socialization</u> 0.849	0.328	72.1%
Motive 2 <i>I have the opportunity to interact with other people</i>	4.18	1.02	-1.46	1.79	0.964	0.266	92.9%
Motive 3 <i>I enjoy the associated associated with the game</i>	4.57	0.55	-1.47	5.39	<u>Performance</u> 0.326	0.779	10.6%
Motive 4 <i>I enjoy the natural elegance of the game</i>	4.25	0.91	-1.60	2.78	0.627	0.525	44,60%
Motive 5 <i>I enjoy the excitement associated with the games</i>	4.62	0.62	-1.98	4.86	<u>Excitement</u> 0.425	0.602	19.1%
Motive 6 <i>I find the games very exciting</i>	4.20	0.86	-1.43	2.62	0.537	0.501	43,60%
Motive 7 <i>I feel like I have won when the team wins</i>	4.37	0.82	-1.54	2.49	<u>Esteem</u> 0.603	0.403	42,50%
Motive 8 <i>I get a sense of accomplishment when the team wins</i>	3.96	1.16	-.91	-0.29	0.558	0.424	41,30%
Motive 9 <i>I can get away from the tension in my life</i>	4.39	0.88	-1.91	4.12	<u>Diversion</u> 0.410	0.50	47,50%
Motive 10 <i>It provides me with a break from my daily routine</i>	4.30	0.99	-1.93	2.98	0.709	0.705	50.3%

of factors, etc., is a rather complicating procedure in EFA. However, a very common practice by researchers is to follow the default procedures on a statistical package (i.e. the utilization of the principal component extraction and the varimax rotation methods) (Lam et al., 2005). The Cattell's (1966) eigenvalue larger than 1.00 was also selected.

TABLE III  
Exploratory Factor Analysis of SPEED

Factor loadings				
Items	Factor 1	Factor 2	Factor 3	Communalities
<i>Motive 1</i>	0.932			0.891
<i>Motive 2</i>	0.959			0.921
<i>Motive 4</i>		0.837		0.733
<i>Motive 6</i>		0.790		0.633
<i>Motive 10</i>		0.668		0.786
<i>Motive 7</i>			0.870	0.608
<i>Motive 8</i>			0.867	0.709
Eigenvalues	2.33	1.63	1.28	
% of variance	33.25	23.29	18.33	
Total variance				74.9

A three factor solution was extracted that accounted for the 74.9% of the total variance, which is quite high considering Streiner (1994) who claimed that extracted factors emerging from an EFA should explain at least 50% of the total variance. All seven items that remained in the scale had quite strong factor loadings, as shown in Table III. According to Guadagnoli and Velicer (1988), when the factorial loadings are from 0.60 and above and the sample of respondents is more than 150, as in our case, the results of EFA are considered reliable. The rate of factor analysis was  $KMO = 0,71$  while the Bartlett's Test of Sphericity was equal to 763.094 with  $p < .001$ .

The results of the EFA show that all items load to three motivational factors. More specifically, the first factor is defined by items *motive1* and *motive2*, creates the dimension "Socialization", and remains intact as the one that Funk et al. (2009) proposed. The second factor is defined by the items *motive4*, *motive6*, and *motive10*, that is, one performance item, one excitement item and a diversion item. This new factor actually describes all the positive outcomes that a game attendance seems to offer to the human psychology and for this reason it is labeled "Excitement". Finally, Factor 3 is defined by the two esteem items and it remains intact as the *Esteem* factor proposed by Funk and his cooperates (2009).

*Confirmatory Factor Analysis:* of the emerging three-factor model was then conducted. Each of the seven items was allowed to load only on its hypothesized factors emerged from the EFA. All of the cross-loadings were once again set to zero. Factor variances were fixed to unity and error terms were not permitted to correlate. The SPEED items' skewness ranged from -

1.91 to -0.90, while the kurtosis values ranged from -.32 to 3.02 (Table IV). The model's fit indices once again showed a better but not satisfactory enough adaptation of the data collected from the Greek fans. More specifically, it emerged that: Satorra-Bentler Scale  $\chi^2 = 532.533$ ,  $df = 21$ ,  $p < .001$ , NNFI = .80, CFI = .89, SRMR = .111, RMSEA = .145 and RMSEA 90% CI = .112 -.179.

TABLE IV  
Descriptive Statistics And Confirmatory Factor Analysis Results Of The 3-Factor Speed  
"When Attending My Team's Games..."

Item	M	SD	Skewness	Kurtosis	Factor loading	Error term	Item variance explained (%)
Motive 1 <i>I have the chance to socialize with others</i>	4.16	.94	-1.27	1.49	<u>Socialization</u> 0.849	0.52	72%
Motive 2 <i>I have the opportunity to interact with other people</i>	4.17	1.02	-1.45	1.70	0.964	0.26	93%
Motive 4 <i>I enjoy the natural elegance of the game the games</i>	4.25	.91	-1.57	2.26	<u>Excitement</u>	0.47	77.3%
Motive 6 <i>I find the games very exciting</i>	4.20	.86	-1.44	2.23	0.607	0.69	37%
Motive 10 <i>It provides me with a break from my daily routine</i>	4.28	.99	-1.91	3.02	0.470	0.79	30.2%
Motive 7 <i>I feel like I have won when the team wins</i>	4.37	.82	-1.49	2.38	<u>Esteem</u> 0.943	0.10	95.2%
Motive 8 <i>I get a sense of accomplishment when the team wins</i>	3.96	1.16	-.90	-.32	0.832	0.53	50.7%

**Reliability analysis:** The values of alpha were calculated (Cronbach, 1951) to assess the internal consistency reliabilities of the scales. Alpha coefficients were 0.911 for "Socialization", 0.731 for "Excitement" and 0.76 for "Esteem". The alpha for the whole scale was calculated to be 0.75 (Table 5). According to Guagnoli and Velicer (1988), when factor loadings are in the range of 0.60 –as in the present factor solution- solutions are considered stable when obtained with samples greater than 150, as in the present research.

## DESCRIPTIVE STATISTICS

Descriptive statistics were contacted in order for the second hypothesis to be examined. The excitement dimension of the fans' motives had the highest mean score (4.24), while the socialization (4.17) and esteem (4.17) had lower but more than satisfactory mean scores –taking into account that the answers were, after the transformation, calculated on a 5-point Likert scale. These results suggest that the fans are highly motivated by almost all dimensions, but maybe there is some space for the teams to positively inspire their supporters' socialization.

TABLE V  
*Descriptive Statistics And Reliability Analysis For The Fans' Motives*

Factors	M	S.D	$\alpha$
<i>Socialization</i>	4.74	.94	.911
<i>Excitement</i>	4.24	.71	.731
<i>Esteem</i>	4.17	.87	.76

## RELATIONSHIP BETWEEN MOTIVATION AND INTENTION TO ATTEND FUTURE GAMES

Regression analysis was performed with the three motivation dimensions as the independent variable and the intention of the fans to attend future games as the dependent one in order both to study the third research hypothesis and to further assess the scale's construct validity. The analysis indicated that the motivation dimensions predicted a quite significant ( $F=3.34$ ,  $p<0.05$ ) but moderate proportion of variance (24%) of the dependent variable (Table VI). Actually, only the esteem dimension ( $t=2.87$ ,  $p<0.05$ ) offered some contribution to the fans' intention to attend future games of their team.

TABLE VI  
*Regression Analysis For The Prediction Of The Fans' Intention To Attend Future Games*

Motivation dimensions	B	$\beta$	t	p
<i>Excitement</i>	-0,073	-0,043	-0,631	0,529
<i>Socialization</i>	-0,128	-0,111	-1,685	0,093
<i>Esteem</i>	0,294	0,196	2,87	0,004

## Discussion and Conclusion

The main objective of this study was to provide the Greek sports community with a comprehensive, valid and reliable tool for understanding the motives that affect fans when deciding to attend a football team's game. Attending sport events is one of the most popular forms of leisure activity world-wide, attracting millions of fans every week (Theodorakis et al., 2010). For this reason, the psychometric properties of the translated into Greek SPEED scale was first examined. The responses gathered from the translated scale did not support adequately the hypothesized dimensionality of the original one. After confirmatory and exploratory factor analyses were conducted, a three factor solution resulted, that almost identically reproduced the three out of the five factors that initially characterized the Australian version of SPEED (Funk et al., 2009). The emerging factors were: *socialization*, *excitement* (with one performance item, one excitement item and one diversion item), and *esteem*. Both the *Socialization* and *Esteem* factors were clearly defined by the original scale while the *Performance*, *Excitement* and *Diversion* dimensions of the original one did not emerge as distinct factors. The Confirmatory Factor Analysis that was once again conducted did not give safe results of the construct's validity, though the reliability analysis of the whole scale and almost all its subscales showed a high internal consistency.

Although the factor solution emerging from the EFA did not match the five factors structure of SPEED, the factors' loadings with items from separate domains is quite common, especially in leisure research (Dimanche, Havitz & Howard, 1991; Havitz, Dimanche & Howard, 1993; Vlachopoulos et al., 2008; Vlachopoulos, Ntoumanis & Smith, 2010). In the research conducted, three of the original items were deleted from the Greek translated version of SPEED, defining three out of the five initial factors. *Socialization* and *Esteem* remained invariable after the translation and use of SPEED, suggesting that the need for interaction with others and his/her will to identify with the team are quite identically evaluated by both Australian and Greek respondents.

Finally, *Excitement* is defined by one *performance*, one *excitement*, and one *diversion* item. Its internal consistency is relatively high ( $\alpha=0.73$ ). This unification is probably the result of the Greek fans' different culture, especially of what do they find important when motivated to attend a football game. In any case, only by testing the SPEED scale in other cultural, sport and game contexts, will such issues be resolved. The development of additional items that are culturally congruent to the Greek football fandom seems

also quite important. Although still not perfect, the translated SPEED seems as a useful tool -especially in contributing to the bridging of theory (academics) with practice (marketing manager of clubs/athletes/ federations). The most important is that it's a short and easy to complete questionnaire that could be conveniently distributed inside an arena, thus leading to ease of use in field settings.

The Greek fans seem to be significantly motivated by both the *Socialization* and *Excitement* variables, as well as the *Esteem* items. This is an issue that should be considered by event organizers, although, this last factor seem to have some space for amelioration. Such results come to confirm the second research question. The motivation of the Greek fandom in order to attend football games should be absolutely taken under serious consideration by the sport teams' marketing managers. Individuals use sport consumption activities as a means for social interaction with other spectators, participants, friends and family as well as escaping daily work and life routines and getting more identified with the team as a whole (Funk et al., 2012; Wann, 1995). All these benefits are less dependent upon the unique nature of the sport product or service. These benefits can be obtained through many consumption experiences beyond sport (e.g., restaurants, theatre, casinos) and for this reason may be quite exploited by teams' marketing managers. They could, for example, enhance the interaction of spectators by giving them more opportunities to socialize before, during and after the game, though the social media throughout the week or even by offering different activities in the stadium during the week. The creation of a strong and well organized database of the team's fans will also help marketing managers to offer the appropriate activities to people with common characteristics or interests in order to enhance identification (eg. via various social media applications). Festivals or other events after winning games, opportunities for discussion after defeats or even thank you messages for their support may moreover enhance *Esteem*. Finally, reproducing an impressive game phase on the stadium's screen, with the use of music or speaking and events before, during and after the game may lead to a development of *Excitement* sentiments.

As previously noted, this study also aimed to test the influence of fans' motivation on their intention to attend future games. We hypothesized that fans' motivation will influence their intention to attend future games. The results provided support only for the *Esteem* factor. It seems that esteem motivates fans when they come to decide about their future attendance. Marketing managers should consider the developing of actions that will further enforce the fan's bonding with the team, in order for them to feel even more

tied to it. The further refinement of the translated into Greek SPEED questionnaire may also affect the relationship among the fans' motives and their willing to attend their favorite team's games.

### **Limitations and future research**

Several limitations are acknowledged in the present study. The current investigation should be only considered a first step in the development and testing of the translated into Greek SPEED as it is a new instrument and additional research should be conducted to further test its construct validity. The sport motivation scale was developed primarily for fans of professional soccer league, in Greece. Further studies would be required to ascertain whether the proposed model is applicable in different settings and sports. Second, the psychometric properties of the measurement scale were partially verified with a specific sample (fans of soccer games). Fans in the same demographic groups can also have very different psychographic profiles and combining demographic variables (e.g. demographic and/or geographic segmentation) with psychographic variables (e.g. psychographic and/or behavioral segmentation) provides a clearer insight into marketing and communication strategy formulation. Further tests of the psychometric properties of the scales using different samples in other event contexts would be desirable to increase confidence in the generalizability of the results.

As a general conclusion it seems that cultural variations may play a significant role in the conceptualization of motivation especially in professional sport events. Comparing sport motivation for fans of different cultures or nationalities will give a more focused approach to define and segment international sport consumer markets.

Future research should examine the extent to which its factor structure is invariant across fans having different gender, supporting different teams or from different sports and/or leagues, attending games in different stadiums and, even, residing in different countries. Its small size and its ability to be used in game settings, is an advantage that should absolutely be taken into consideration when planning and conducting a research as it gives to both academics and practitioners the possibility to simultaneously gather data concerning fan's behavior (e.g. attachment with the team, identification to the team, etc) and so segment fans by using levels of their behavior/motivation. As for the scale's predicting ability, the SPEED should be used with caution till its refinement gives more concrete results.

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