

Translation and Portuguese Validation of the Place Attachment Scale

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Abstract

Place Attachment is a concept with growing importance in Sports tourism. This concept refers to the extent to which an individual values or identifies with a particular environmental setting (Moore & Graefe, 1994; Moore & Scott, 2003). Four dimensions constitute Place attachment: place dependence, place identity, social bonding and affective attachment (Kyle et al., 2004b).

In this study, the concept was brought to the team sports, namely, to Soccer. The objective of this study is to translate the Place Attachment Scale (PAS) into Portuguese and to examine the cross-cultural generalizability of the factor structure and psychometric properties underlying responses to the translated scale. Therefore, the present study extends the use of the PAS to Portuguese soccer fans through testing the psychometric properties and the cross-cultural validity of the translated scales. The results of the confirmatory factor analysis and the alpha scores provide evidence for the validity and reliability of the scale used.

Keywords: Place attachment, Translation, Validation, Tourism, Sport consumption, Sport fan

Introduction

Tourism is an industry that is significantly associated with the sports industry (Chelladurai & Turner, 2005). Sport and tourism are major global phenomena that demonstrate an increasing degree of integration (Gibson, 1998). In the last decades, tourism for sports purposes was marked by a growing acknowledgment of the inherent relationship between sport and tourism (Gibson, 2003). A substantial amount of sporting activity is characterized by travel (Hinch & Higham, 2001) and the opposite also happens. The confluence of sport and tourism, and the definition of sport tourism have therefore become subjects of academic attention (Higham & Hinch, 2003). When it comes to Portugal, the organization of the European Championship of Football, in 2004, is a big representative of how sport and tourism can relate and of the way a country can welcome tourists that are also big fans of a team, in this case, a national team. In this competition, Portugal had the experience of spectators travelling great distances only to attend soccer games, to live the experience, to get to know foreigners and another country.

Gibson, in 2003, in the article Sport Tourism: An Introduction to the special issue resumes some interesting data. Over the last ten years, a number of specialized sport tourism books have been published. A growing number of conferences also adopted a sport tourism theme through the 1990's. Government policy has also been influenced by sport tourism, since various governments have introduced sport tourism initiatives to encourage tourism related to sport in their countries. In recent years, in line with the increased academic and practical attention to this form of tourism, universities have added sport tourism to their curricula in various ways. Gibson (1998) defines sport tourism as "leisure-based travel that takes individuals temporarily outside of their home communities to participate in physical activities, to watch physical activities, or to venerate attractions associated with physical activities" (p. 49). This definition highlights sport as a touristic activity and alludes to the spatial and temporal dimensions that define tourism (Higham & Hinch, 2003).

In Gibson's view (2003) sports-related travel may be undertaken for one of three purposes:

- Active participation, such as traveling to take part in a sports event as a participant;
- Attending to a sporting event, for example, traveling to watch others participate in a sports event, like a soccer match;

- Nostalgia, for example, traveling to visit sports-related attractions such as halls of fame and famous stadiums (for instance, when it comes to this country, and because there are a lot of emigrants of Portugal in other countries, like France, Belgium or Luxembourg, people come back to visit the country to attend games or to go to sport facilities because of the Nostalgia purpose).

Sport also has unique characteristics of sport as a tourist attraction: a unique set of rules (with a special playing surface and duration of the match), competition relating to physical prowess and the playfulness inherent in sport.

Although there are numerous definitions of sport tourism, Hinch and Higham (2001) note that all share three key dimensions:

- Temporal dimension – the travel is temporary;
- Spatial dimension – individuals must leave and eventually return home;
- Relationship – the purpose of travel must be sports related.

The core elements of sport as a tourism attraction are summarized in Table 1.

Table 1: The core elements of sport as tourism attraction

Core elements of sport as a tourism attraction	Description
Sport attraction nucleus	
• Rules	Spatial and temporal organization of sports
• Competition	Degree and type, physical powers, skill sets and strategies
• Play	Uncertain of outcome and sanctioned display
Space	
• Space	Travel distance, threshold and location
• Environment	Environmental resources and impacts
• Place	Role of sports in constructing meaning attached to space
Time	
• Short Term	Travel behavior and duration of visit
• Medium Term	Seasonal travel patterns
• Long Term	Long term evolution of sport and tourism

(Adapted from Higham & Hinch, 2003)

When it comes to the second mentioned, the spatial dimension, the geographic context is the main issue, which may be further divided into space, environment and place (Hall & Page, 1999, cit. by Higham & Hinch, 2003). Relatively to space, the more powerful the attraction, the further people will be willing to travel because of something. When it comes to environment, the concept refers to the impact of the tourists on the environment and to the delight of the person to be a part of a certain environment. Finally, the concept that is more related with this investigation, the place. Tuan, in 1974 stated that place is related with the meaning of a certain place to a person or group (cit. Higham & Hinch, 2003). The more meaningful that a destination is to visitors; the less likely it is to be substituted by another place (Williams et al., 1992).

In the touristic perspective, and also in the sport tourism context, the concept of place is, as can be inferred, really important. Sport can also determine the construct that a person has of a certain place. Therefore, the concept of sport tourism and the related concept of place attachment will be analyzed carefully.

Current studies in the leisure and tourism literature have shown that the concept of place attachment is helpful for understanding aspects of an individual's leisure and tourism behavior (Alexandris et al., 2006). Place meanings have been widely studied in many different fields of

knowledge. This concept refers to the extent to which an individual values or identifies with a particular environmental setting (Moore & Graefe, 1994; Moore & Scott, 2003). According to Williams and Vaske (2003) place attachment refers to the emotional and symbolic relationships that individuals form with recreational resources. Hammitt and colleagues (2006), name the concept place bonding, stating that it is a common phenomenon in many recreation areas, where people develop an affective and cognitive based attachment to special resource settings. Kyle and colleagues (2004b) also talk about place bonding when it comes to place attachment, but they also refer to terms as “sense of place” (also used by Nanzer in 2004), “rootedness”, “insidedness” or “environmental embeddedness”. Smaldone and colleagues (2005) calls it “special places” and applied a multi-dimensional, representative and inclusive definition, where place attachment is viewed as the extent to which a person has an emotional, functional, cognitive, symbolic, spiritual or affective connection to a particular physical place, environment, or setting in a particular condition and at a particular time (it is a varying process also, along the time).

The degree and strength of this connection depends on a multitude of factors, including the physical characteristics of the place, the social relationships and experiences of the individuals involved, the activities or rituals done at the place, the individual’s length of association with the place, as well as the individual’s personal set of beliefs, values and preferences (Smaldone et al., 2005; Moore & Graefe, 1994).

All these words or expressions emphasize the meaning not only of the actual place itself, but also the individual’s feelings, relationships and interactions with the place.

Schreyer and White (1981) proposed that place attachment represents a user’s valuing of a recreation setting and that this valuation consists of two dimensions: functional meanings (relating to specific activity needs) and emotional-symbolic meanings. In other words, a place can be valued by a recreationist because it is a “good” place to undertake a particular activity, or it can be valuable because it is seen as “special” for emotional, symbolic or both reasons.

Williams and Roggenbuck (1989, cit. Kyle et al. 2004a) developed these concepts in a study where they found three distinct dimensions of place attachment, two of them related to the dimensions found by the authors mentioned above:

- The first dimension corresponded to the emotional-symbolic meanings – this dimension was termed “place identity” because it included items that represent the extent to which using the place is a central aspect of subjects’ lives;
- The second dimension, relating to the functional meanings proposed before, was named “place dependence” because it was composed of items indicating that subjects were less willing to use another site for their particular activities;
- The third, included items that made negative appraisals of the setting and was considered a place indifferent dimension.

Low and Altman, in 1992 (cit. Kyle et. al, 2004a) indicated that most conceptualizations include three components: affect, cognition and practice. The affective component is most often reflected in emotional attachments to place, whereas the cognitive component concerns thoughts, knowledge and beliefs related to place. Practice refers to the behaviors and activities that occur within spatial contexts.

Subsequent research using these three concepts has shown the place identity and place dependence dimensions to be the most reliable across a variety of samples (Moore & Graefe, 1994; Warzecha & Lime, 2001).

Moore and Graefe, in 1994, developed a model to help explain how such relationships with recreation settings form. This model was then tested with a sample of users of three "rail-trails" (multiuse recreation trails constructed on unused railroad rights-of-way). Results supported the

literature, suggesting that place attachment has at least two dimensions: a place dependence, reflecting the importance of the place in facilitating a user's activity, and a more affective place identity, reflecting an individual's valuing of a setting for more symbolic or emotional reasons.

Place attachment is, in this way, composed out of two components: place identity and place dependence (Kyle et al., 2004a). According to the authors, place dependence reflects the importance of a resource for providing amenities necessary for desired activities. Indeed, the place has a functional meaning, because it collects attributes that allow the pursuit of a focal activity. Kyle et al. (2004a) refer that the value of a specific setting to the individual is based on specificity, functionality and satisfaction of a place and its "goodness" for an activity. Place dependence refers to the specific functions and conditions of a place that are necessary to satisfy an individual's needs and goals, in comparison to other similar or competitive places (Williams & Vaske, 2003). These functions or conditions might be related to the physical aspects of the place (Kyle et al., 2004c) or, for instance, with the accessibility (Williams & Vaske, 2003).

Place identity refers to, as Proshansky described (1978, p. 155) "those dimensions of the self that define the individual's personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals, and behavioral tendencies and skills relevant to this environment" (cit. Kyle et al., 2004a). Jorgensen and Stedman (2001, cit. Kyle et al., 2004a) also referred to place identity, saying that it refers to global self-identification similar to conceptualizations of gender identity and role identity. Thus, in addition to being a resource for satisfying explicitly felt behavioral or experiential goals, a place may be viewed as an essential part of one's self, resulting in strong emotional attachment to places (Williams et al. 1992). Place identity has an emotional meaning and it refers to "the symbolic importance of a place as a repository for emotions and relationships that give meanings and purpose to life" (Williams & Vaske, 2003, p. 831). It has been related with the conception of self-identity and seen as a part of one's self that results in developing emotional attachment to a particular place (William et al. 1992). Williams and Vaske (2003) reported that place identity can enhance an individual's self-esteem and increase feelings of belonging to his/her community.

An analysis to some studies about place attachment and its concepts will now be performed. Moore and Graefe study analysis (1994) reveals that place identity can best be predicted by how long users have been associated with the trail, the importance they ascribe to their trail activity, and their level of place dependence. Level of place dependence is best predicted by the distance between the trail and the users' home and users' frequency of trail use. Users' frequency of trail use is most strongly related to their age, the importance they ascribe to their trail activity, and how far the trail is from their home.

One aspect of place attachment that has not been explored empirically is the extent to which people become attached to a specific site versus its larger setting. The main purpose of a study from Moore and Scott (2003) was to examine users' place attachment to a large metropolitan park versus their place attachment to a particular trail located within that same park. They found that: the frequency of use was positively related to both park and trail attachment; levels of trail attachment varied across different trail activities, but levels of park attachment did not; the most powerful predictor of both park attachment and trail attachment was personal commitment to the activity that users were pursuing; and, unlike previous research, factor analyses indicated that both park and trail attachment were unidimensional rather than comprised of place identity and dependence dimensions.

Higham and Hinch (2003) found in a study about the Otago highlanders that spectators were willing to travel greater distances than they did for provincial competitions, also because of the franchise business.

In another study, Alexandris and colleagues (2006), found that the skiers' loyalty was significantly predicted by both the place attachment dimensions (place identity and place

dependence). Besides that, place attachment was significantly predicted by the interaction and physical environment service quality dimensions. The results of this study propose that place attachment is an important construct for ski resort managers and marketers in their effort to build up customer loyalty.

The concept place attachment has been used by investigators to try to understand visitor responses to fee programs on public lands. In 2003a, in a study of Kyle and colleagues, the results indicated that only place identity was a statistically significant moderator, this is, the higher the place identity is, the more recreationists are able to spend in the fee program.

Williams and Watson (1998, cit. Kyle et al., 2004b) found that place dependent respondents were more accepting of fees, whereas place identity was generally associated with negative views of fees. Smaldone and colleagues (2005) used the words “special places” to talk about the emergent importance of planning, always keeping in mind the associated values and the place values to people.

Lots of studies found a positive relation between use frequency and place attachment (Moore & Graefe, 1994; Williams et al., 1992). Bricker and Kerstetter (2000) found that highly specialized individuals rated the place identity dimension as most important, whereas no relationship existed between specialization and place dependence. Instead, place dependence was linked in a positive way to “support for management options” (e.g. development of amenities, trails and extractive uses), whereas place identity held a negative relationship. These studies suggest that recreationists with strong attachments to a place have specific needs when it comes to enjoying their selected leisure experiences.

Alexandris and colleagues (2006) noted that from the definition of the two constructs, it can be argued that building place identity, that has a personal and emotional meaning, is more difficult than building place dependence that is related to the needs satisfied in the place.

Converging trends have led many researchers and writers to conclude that a place is both a personal and a social phenomenon, whereby a place is imbued with meaning by people at both individual and collective levels (Relph, 1976, cit. Smaldone et al., 2005). In resume, theoretical and empirical evidence suggest that place attachment is multidimensional, hard to define, and comprised of a wide range of constructs embodying both setting variables and personal variables (Smaldone et al., 2005). There is evidence that place attachment is a key variable in predicting attitudinal aspects of consumers’ behavior in sport and leisure settings (Bricker & Kerstetter, 2000; Kyle et al., 2004a; Kyle et al., 2004b; Moore & Graefe, 1994; Williams et al., 1992).

The concept was most of the times used in recreational and natural settings (for example: Kyle et al., 2003a, 2003b; Kyle et al., 2004a, 2004b, 2004c; Smaldone et al., 2005). Nanzer used it to measure the sense of place for Michigan (2004). But the concept can also fit when it comes to professional team sports.

The Place Attachment Scale

The employment of quantitative measures of place attachment is a recently considered issue. Some specialists, as can be seen by the data presented before, used some questions to try to identify place attachment.

Kyle and colleagues have been working since the beginning of the century, positioning themselves after the work of other researchers. Subsequent to examine the concepts of place dependence and place identity and analyze the studies around place attachment, Kyle and colleagues (2004b) concluded that those concepts were not sufficient. After Jorgensen and Stedman (2001) and Low and Altman (2002), they considered an attitudinal construct consisting of three components: affect, cognition and behavioral intention.

Relatively to the affective dimension, reflecting human’s emotional bond with the setting, they found that investigators have demonstrated that the affective component, was more salient in some cases, than the other components (e.g. Kyle et al., 2004b; Moore & Graefe, 1994). The second

component of place attachment, reflecting place cognition, was operationalized in terms of place identity, this is, the cognitive connection between the self and the setting (consistent with Proshansky, 1978). Finally, the conative (behavioral) component was undertaken in terms of two dimensions: place dependence, which remains from the former studies presented and social bonding. Several authors have noted the importance of social ties to place (e.g. Hidalgo & Hernandez, 2001): neighbors and friends.

The current investigation was designed to further expand the use of the Place Attachment Scale by translating the scale into Portuguese and into team sports. The Portuguese language is one of the most spoken in the world and is the official language of several countries across five continents – presently, it is estimated that there are more than 223 million Portuguese speakers in over 12 countries). Portuguese is the official language of emerging powers of continental dimensions, like Brazil and Angola, which together with all other Portuguese-speaking countries hold a special commitment to sport in general, but mainly to soccer – in particular, Brazil is considered one of the greatest world powers of this sport. Portugal has a strong tradition not only in competitive soccer but also as an organizer of major international competitions such as the European Football Championship 2004. Brazil will be organizing the next World Cup in 2012 and Angola will be the venue of the next African Cup of nations. To all those competitions, Stadiums are being built or renewed, and fans get more or less attached to those new or to the older Stadiums. Thus, studies on their attachment to the place where the competition takes place are useful to improve the knowledge in the area of sport consumption or fan behavior.

Hence, the objective of this study is to translate the Place Attachment Scale into Portuguese and to examine the cross-cultural generalizability of the factor structure and psychometric properties underlying responses to the translated scale.

Methods

Participants and data collection

Participants in this study were 161 spectators (113 males, 70.2%, and 48 females, 29.8%) who attended a soccer game between two teams from the top professional league in Portugal (response rate = 95%). Their age ranged from 18 to 70 years, with a mean age of 34.04 years (SD = 13.2). The vast majority were employees from the private and state sectors (60.9%), followed by students (18.5%) and self-employed professionals (10.6%); 5% of the participants reported to be unemployed, and 5% were retired individuals. On average, they had attended 5.92 games the previous soccer season. Participants had been attending games for periods of time ranging from 5 to 63 years. The 161 individuals described above participated solely during the reliability and validity steps of the methodology.

With the permission from the soccer club, six skilled research assistants distributed and collected the questionnaires to participants. Participants filled out the forms outside of the stadium before taking their seats at the beginning of the soccer game.

Measures – Place Attachment Scale

The short version of Williams and Vaske's (2003) scale, as adjusted by Kyle and colleagues (2004a), is used to measure Place attachment. Kyle and colleagues (2004a, 2004b) tested this scale and reported good psychometric properties.

The concept of Place attachment was most of the times used in recreational and natural settings (e. g. Kyle et al., 2003a, 2003b; Kyle et al., 2004a, 2004b, 2004c; Smaldone et al., 2005). But Nanzer used it to measure the sense of place for Michigan (2004).

For the first time, in this work, the concept is being used to measure the Place attachment to a stadium, this is, the concept is being brought to the professional team sports context, to measure the allegiance between a fan and the team's soccer stadium. For instance, instead of "The X is the best

place for the recreation activities that I enjoy” the questionnaire was adapted to “The X Stadium is the best place to attend soccer games”.

18 items divided in four dimensions (Place dependence, Affective attachment, Place identity and Social bonding) constitute the Place Attachment Scale. Place dependence – PD (e.g., “this soccer stadium is the best place to watch X play”) is measured with four items; Affective attachment – AA (e.g., “I really enjoy this place”) with five items; Place identity – PI (e.g., “this stadium means a lot to me”) with five items; and Social bonding – SB (e.g., “the time spent here allows me to bond with my family and friends”) with four items. A five-point Likert-type scale (strongly disagree = 1 to strongly agree = 5) was used for all the dimensions.

Results and Discussions

To translate the PAS, the seven-step methodology developed by Vallerand (1989) as described in the physical activity domain by Banville and colleagues (2000), was used. According to Vallerand, this methodology is suitable to insure cross-cultural translation and validation of questionnaires developed for a specific culture.

While the first three steps of the methodology refer to the translation of the scale, the next three refer to the validation of the translated version (Theodorakis et al., 2006). The seventh step – establishing norms, was not presently elaborated since it was out of the scope of the study.

Translation of the Place Attachment Scale

Step one is called the back translation technique (Vallerand, 1989). This technique requires the contribution of four bilingual translators. Translators X and Y were two sport scientists, with a

PhD in sport sciences who independently translated the PAS from English to Portuguese; after that, translators W and Z, also specialists, translated it back to English.

A comparison of the two translated versions (translator X and Y) revealed differences in seven of the 18 items of the PAS. Following Banville and colleagues (2000), the non-similar items were compared and the translators agreed which translated items to keep. Then, two other sport researchers with similar academic background (translators W and Z) re-translated all 18 items of the PAS back into English.

Despite that almost none of the re-translated items were identical to the original ones, all of them were kept, as their meaning was judged to be similar to the meaning of the original PAS items.

The goal of step two was to compare the re-translated and the original items of PAS, and to prepare a satisfactory final experimental version. To avoid single-person bias, the committee comprised of the four bilingual translators was employed (Banville et al. 2000). A final experimental version was defined.

In step three, the final experimental version of PAS was distributed to a sample of 20 people (M age= 30, SD =4, 3), with similar characteristics to those of the target population (Banville et al., 2000) to provide a first feedback on the translated scale. The only characteristic they were demanded to have was to consider themselves fans of some team or club. Firstly, they were instructed to provide their responses on the Portuguese version of the scale, and secondly to indicate any words or phrases that they did not understand or they thought that required modification. They were also asked to provide their own suggestions. Then, the committee members reviewed the respondents' comments and made minor modifications to the experimental version, especially in the graphic part.

In this research the final translated scales were also shown to a qualified Portuguese-English teacher, which reviewed the translation in order to ensure the appropriate language and comprehensiveness.

Therefore, the first three steps performed allowed us to have a PAS-p translated correctly.

Reliability and Validity of the Portuguese version of the Place attachment scale

Step four evaluates the content and concurrent validity of the translated scale.

The committee members, who examined whether each translated item and the corresponding original item, were identical in meaning, secured content validity.

Further, the concurrent validity of the PAS responses was examined through Pearson's correlations between the original and the translated scales.

To examine the concurrent validity of the translated scale, data from a sample of 36 Portuguese bilingual university students (M age= 22.6, SD=2.9) were used. In line with Banville and colleagues (2000), a sample of 20 to 30 participants is recommended, but this sample consisted of more people.

Before answering both versions of the scale, the Portuguese participants' ability to understand, read, write and speak English was assessed using a four-item scale developed by Vallerand and Halliwell (1983) and used by Theodorakis and colleagues (2006). All participants, except two (who scored eight and were excluded from this group), scored individually higher than 12 in this scale (maximum 20). Subsequently, they answered both versions of PAS in a classroom setting. Half of the sample completed the Portuguese version first, and the other half, the English version first. One month later they repeated the process by answering both versions in reverse order. Each individual took around ten minutes to respond to the entire questionnaire. Pearson's correlation between the original and the translated version revealed high coefficients, indicating high concurrent validity for the translated PAS. Four high correlations were found: Place dependence (.72), Place identity (.81), Affective attachment (.86) and Social bonding (.87), in a total of .91, a high and satisfactory correlation.

In step five the reliability of the translated version of the PAS was evaluated using internal consistency and test-retest reliability. Internal consistency reliability is an indicator of how well the individual items of a scale reflect a common, underlying concept (Spector, 1992, cit. Alexandris et al., 1999). The internal consistency was determined through Cronbach's alpha (Cronbach, 1951, cit. Theodorakis et al., 2006) – coefficient alpha is the statistic most often used to assess the internal consistency (Spector, 1992, cit. Alexandris et al., 1999). The Cronbach's alpha value for the translated scale was .75. Test-retest reliability was determined through the intra-class correlation coefficient. A value of .84, indicated satisfactory test-retest reliability.

Finally, the sixth step aims to evaluate the construct validity of the Portuguese version of the PAS (PAS-p). The factor structure and measurement invariance of PAS responses were examined, between the translated and the original versions of the instrument.

To examine the factorial validity of the PAS-p, a confirmatory factor analysis (CFA) was performed, using the EQS (Bentler, 1995). To test, if all variables were normally distributed, an exploratory data analysis based on the inspection of skewness values and kurtosis values. To assess the fit of CFA models researchers have developed and presented a great number of fit indices. In this study, the fit indices used for model evaluation were: the Sattora-Bentler scaled .2 statistic (.2), the robust Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA). Generally, for CFI values above than .90 indicate an acceptable fit between the observed data and the hypothesized model (Hu & Bentler, 1995), while values above than .95 indicate an excellent fit (Hu & Bentler, 1999). RMSEA values ranging from .06 to .08 declare an adequate fit with .10 to be considered as the upper limit (Byrne, 2000). For the Portuguese version of the PAS-P, results indicated an acceptable fit of the model to the data: $SB \chi^2 = 204, 91, df = 113, p < .001, CFI = .901, RMSEA = .071, 90\% RMSEA CI = .055 - .086.$

Place Attachment Dimensions

Place bonds vary with individual interaction with the environment or with past experiences and memories. Relatively to place attachment, in this case, stadium attachment, the total score can vary between 18 and 90 points. The total score of place dependence and social bonding (PD and SB)

can vary between 4 and 20. The total score of affective attachment and place identity (AA and PI) can vary between 5 and 25.

In this sample of 161 individuals, the minimum range was 37 and the maximum range was 89 (Table 2). Around 75% of the individuals scored higher than 60 points and 50% of the sample scored higher than 70 points, what shows that the sample was highly attached with the stadium, in the several dimensions. This fact can also be seen by the mean value (M= 68.70; SD=11.51).

Relatively to the several dimensions, the relative higher score was the affective attachment dimension (M=21.1 in 25 possible points), followed by the place identity (M=18.7 in 25 possible points) and the social bonding (M=14.8 in 20 possible points) dimensions. The place dependence dimension scored the lowest relative points (M=14.1 in 20 possible maximum points).

Table 2: Descriptive Statistics of PAS and Dimensions

	N	Minimum	Maximum	Mean	SD
Total score PAS	161	37	89	68.7	11.51
Total score PD	161	8	20	14.1	2.4
Total score SB	161	4	20	14.8	3.8
Total score AA	161	11	25	21.1	3.3
Total score PI	161	5	25	18.7	4.6

Conclusion

The PAS was translated into the PAS-p, validated and it can be used in the future in the Portuguese language and reality. However additional research should be conducted in order to better determine the construct validity into Portuguese. In addition, more research should be performed when it comes to the place attachment to a stadium or a sport facility whereas people go as fans and not as sport participants.

The PAS-p may be employed by sport marketers to determine the attachment fans have to the stadium. This scale can be used to boost the comprehension about sport consumption in Portugal, in general, and about sport fans, in particular. Place identification can be an important variable in sport marketing research, given that it could assist sport marketers to develop various marketing strategies such as Market segmentation, ticket-pricing strategies, sponsorship programs and communication strategies. Future practical research should focus on several activities that can be developed to increase place identity, affective attachment and social bonding: organization of events, involvement of people in the events, involvement of the families in the events, promotion of fun activities, improving service quality. To increase place dependence, there are also some actions that can be performed: asking people what they need in the stadium, ensuring the quality of the existing services and facilities, improving parking places and accessibilities, respecting the needs and desires of the costumers.

The English-speaking countries, as the United States of America, United Kingdom and Australia, are dominant when it comes to scientific research, namely, in sport management and fan consumption behavior. By translating and validating this scale into Portuguese we are contributing to worldwide knowledge about sport fans.

Reference

- Alexandris, K.; Kouthouris, C. & Meligdis, A. (2006). Increasing customers' loyalty in a skiing resort – The contribution of place attachment and service quality. *International Journal of Contemporary Hospitality Management*, 18 (5): 414-425.
- Alexandris, K.; Papadopoulou, P.; Palialia, E. & Vasiliadis, T. (1999). Customer satisfaction: a comparison between public and private sport and fitness clubs in Greece. *Journal for Sport Management*, 6 (1): 40-54.

- Banville, D.; Desrosiers, P. & Genet-Volet, Y. (2000). Translating questionnaires and inventories using a cross-cultural translation technique. *Journal of Teaching in Physical Education*, 19: 374-387.
- Bentler, P. (1995). *EQS Structural Equations Program Manual*. Encino: Multivariate Software, Inc.
- Bricker, K. & Kerstetter D. (2000). Level of specialization and place attachment: an exploratory study of whitewater recreationists. *Leisure Sciences*, 22 (4): 233-257.
- Byrne, B. (2000). *Structural Equation Modeling with AMOS: Basic concepts, Applications and Programming*. Mahwah: Lawrence Erlbaum Associates.
- Chelladurai, P.; Turner, B. (2005). Management. *Berkshire Encyclopedia of World Sport*, 3: 954.
- Gibson, H. (1998). Sport Tourism: a critical analysis of research. *Sport Management Review*, 1 (1): 45-76.
- Gibson, H. (2003). Sport tourism: An introduction to the special issue. *Journal of Sport Management*, 17: 205-213.
- Hammitt, W.; Backlund, E. & Bixler, R. (2006). Place bonding for recreation places: conceptual and empirical development. *Leisure studies*, 25 (1): 17-41.
- Hidalgo, M. & Hernández, B. (2001). Place attachment: conceptual and empirical questions. *Journal of environmental Psychology*, 21: 273-281.
- Higham, J. & Hinch, T. (2003). Sport, space, and time: effects of the Otago Highlanders franchise on tourism. *Journal of Sport Management*: 17 (3): 235-257.
- Hinch, T. & Higham, J. (2001) Sport Tourism: A Framework for Research. *The International Journal of Tourism Research*, 3 (1): 45-58.
- Hu, L. & Bentler, P. (1995). Evaluating model fit. In: R. H. Hoyle (Ed.), *Structural Equation Modeling: concepts, issues and applications*. Thousand Oaks, CA: Sage.
- Hu, L. & Bentler, P. (1999). Cut off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6: 1-55.
- Kyle, G.; Absher, J. & Graefe, A. (2003a). The moderating Role of Place Attachment on the Relationship Between Attitudes Toward Fees and Spending Preferences. *Leisure Sciences*, 25: 33-50.
- Kyle, G.; Bricker, K.; Graefe, A. & Wickham, T. (2004a). An Examination of Recreationists' Relationship with Activities and Settings. *Leisure Sciences*, 26: 123-142.
- Kyle, G.; Graefe, A.; Manning, R. & Bacon, J. (2003b). An Examination of the relationship between leisure activity involvement and place attachment among hikers along the Appalachian Trail. *Journal of Leisure Research*, 35 (3): 249-273.
- Kyle, G.; Graefe, A.; Manning, R. & Bacon, J. (2004b). Effect of activity involvement and place attachment on recreationists' perceptions of setting density. *Journal of Leisure Research*, 36: 209-231.
- Kyle, G.; Mowen, A. & Tarrant, M. (2004c). Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment. *Journal of Environmental Psychology*, 24: 439-454.
- Moore, R. & Graefe, A. (1994). Attachments to recreation settings: the case of rail-trail users. *Leisure Sciences*, 16 (1): 17-31.
- Moore, R. & Scott, D. (2003). Place attachment and context: comparing a park and a trail within. *Forest Science*, 49 (6): 877-884.
- Nanzer, B. (2004). Measuring sense of place: a scale for Michigan. *Administrative Theory & Praxis*, 26 (3): 362-382.

- Schreyer, R. & White, R. (1981). Nontraditional uses of the national parks. *Leisure Sciences*, 4 (3): 325-341.
- Smaldone, D.; Harris, C.; Sanyal, N. & Lind, D. (2005). Place attachment and Management of Critical Park issues in Grand Teton National Park. *Journal of Park and Recreation Administration*, 23 (1): 90-114.
- Theodorakis, N.; Vlachopoulos, S.; Wann, D.; Afthinos, Y. & Nassis, P. (2006). Measuring Team Identification: Translation and Cross-cultural Validity of the Sport Spectator Identification Scale. *International Journal of Sport Management*, 7 (4): 506-522.
- Vallerand, R. J. (1989). Vers une méthodologie de validation trans-culturelle de questionnaires psychologiques: Implications pour la reserche en langue française. *Psychologie Canadienne*, 30: 662-680.
- Warzecha, C. & Lime, D. (2001). Place attachment in Canyon lands National Park: Visitors' assessment of setting attributes on the Colorado and Green Rivers. *Journal of Park and Recreation Administration*, 19 (1): 59-78.
- Williams, D. & Vaske, J. (2003). The measurement of attachment: validity and generalizability of a Psychometric approach. *Forest Science*, 49 (6): 830-840.
- Williams, D.; Patterson, M.; Roggenbuck, J. & Watson, A. (1992). Beyond the commodity metaphor: Examining emotional and symbolic attachment to place. *Leisure Sciences*, 14: 29-46.