

FANS' MULTIPLE POINTS OF ATTACHMENT AND THEIR INFLUENCE ON ATTENDANCE IN RUGBY MATCHES

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ABSTRACT

Rugby is one of South Africa's big three sports, alongside soccer and cricket. For many South African fans, rugby is a medium that provides entertainment, cultural identity and a sense of belonging to a particular sport. One of the main appeals for watching competitive sport events is the distinctive nature of competition. Unlike the predictable form of leisure behaviour, sport events embody an experience in which outcomes are unknown prior to the commencement of the event. The purpose of the study was to identify specific points (objects) of attachment that influence fan attendance. The secondary purpose of the study was to use the scale items to examine the relationship between the identified factors on fan attendance. The two measures of fan attendance namely, frequency of attendance and length of time being a fan used in the study were obtained from previous studies. Completed questionnaires were obtained from respondents (N=180) from a provincial based team in Gauteng. The data was analysed using exploratory factor analysis, independent sample t-tests and regression analysis. In addition, rugby fans were categorised into die-hard, submissive and care free casuals or theatre-goers. A priori determination of five points of attachment, namely attachment to a team, player, sport, coach and level of sport attachment were used to examine the relationship of the points of attachment through regression models. Attachment to rugby as a sport in general appeared to significantly predict fan attendance. Implications for future research are outlined.

Key words: Fan attachment; Fan attendance; Rugby; Social identity

INTRODUCTION

Rugby is one of South Africa's big three sports, alongside soccer and cricket. For many South African fans, rugby is a medium that provides entertainment, cultural identity and a sense of belonging to a sport. One of South Africa's rugby highlights took place in 1995 when the country hosted the biggest tournament, the Rugby World Cup. The 1995 Rugby World Cup was held in South Africa just one year after the country's first democratic elections. South Africa competed in the World Cup for the first time, following its re-entry into the international sport arena after many years of sport isolation, hosting the finals and celebrating their inclusion in the competition in the best possible way by defeating New Zealand 15-12 to become world champions (Du Plessis, 2007). Whilst the triumph of the 1995 Rugby World Cup may still be embedded on the minds of many South Africans, it is viewed as temporary in uniting a rainbow nation with a "eighty minutes patriotism" (Jarvie, 1994: 115). In addition, arguments have been put forward by many scholars that sport in general in South

Africa has an inflated status as a nation builder and social unifier (Labuschagne, 2008). For example, the 1995 Rugby World Cup was invigorating for South Africans at a time when the nation was spurred through the one team, one nation and the rainbow nation catchphrases, which served its time and purpose. However, these slogans gradually faded and the lustre dissipated largely in the light of ongoing transformation squabbles within sport (Booth, 1996; Black & Nauright, 1998; Gründlingh, 1998). Gründlingh (1998: 75), commenting on the performance of the South African rugby team in the 1995 Rugby World Cup states that:

“the fact that the Springboks won all their matches ensured that the public interest is kept alive”, adding that “if the results were different there would not have been much cause for nation wide celebration”.

Balibar cited in Booth (1996) is of the opinion that no nation possesses an ethnic base naturally, as it emerges from greater social cohesions that materialise from a natural community that transcends individual or social conditions. In other words, forced cohesion cannot unite a divided nation which was historically characterised by deep divisions as a result of past segregation policies where they were no form of a united community between a country's racial groupings.

One of the main appeals amongst fans for watching a sport event is the distinctive nature of athletic competitiveness. Like many competitive sport events including rugby, the final outcome of the game is unknown prior to the commencement of the event (Madrigal, 1995). Sport events also symbolise hedonic experiences in which the event itself elicits a sense of drama and outcomes yield cognitions about the “performance as well as affective reactions” (Wann & Branscombe, 1992: 49). Research suggests that the type and extent of cognition and emotions that are associated with watching one's favourite team participate at a competitive level is dependent upon an individual's outlook towards the team (Madrigal, 1995).

Before venturing into the realms of fan attendance and sport consumption behaviour, the study precedes by an examination of the description of a fan.

Fan

A fan is a person with an overwhelming liking or interest in a particular team (Hunt *et al.*, 1999). The behaviour that a person exhibits is typically viewed by others as unusual or unconventional but “does not violate prevailing social norms” (Thorne & Bruner, 2006: 52). Such fans may be fanatical by regularly following a team in terms of match updates (for example, by finding out matches won or lost when games are not attended) by attending games, engaging in activities such as purchasing memorabilia, such as a jerseys and caps, of the team. Such fans are distinguished in literature from a dysfunctional fan whereby the latter is described as anti-social, disruptive or deviant and are more likely to be verbally aggressive towards officials or other fans (Wakefield & Wann, 2006).

Hunt *et al.* (1999: 440) define a fan as “an enthusiastic person of some particular sport consumption object (team)”. Fanaticism on the other hand is defined as the degree of intensity to which one is a fan, with the level of involvement ranging from low to high intensity. Although this term is often used negatively, this research applies it neutrally (Thorne & Bruner, 2006). In some instances the terms fans and spectators are used

interchangeably (Funk & James, 2001; Wann & Waddill, 2003). Sloan (1989: 177) made a distinction between fans and spectators, noting that spectators in its strictest sense are those who merely watch and observe, while fans are the "enthusiastic devotees of a given diversion". Wann and Branscombe (1990) presented categories of die-hard and fair weather fans. Die-hard fans stand by the team even after years of losing, while fair-weather fans support the team when successful, but will not stay if the team starts losing. Die-hard fans possess a high emotional attachment to a team that is enduring; make major financial investment and time commitments (Trail *et al.*, 2003).

Literature groundwork for this study is based on an existing social identity theory in order to examine variables of fan attachment that influence fan attendance (Laverie & Arnett, 2000; Gwinner & Swanson, 2003). An overview of this theory is a useful point of departure in understanding salient factors that influence a fan attendance.

Fan attendance

The social identity theory focuses on the connection between self and society. The self is composed of multiple selves some of which are more important than others (Trail *et al.*, 2000). The view of the self recognise that social units that people live in, are relatively small and these networks of social relationships impacts on a person's identity (Laverie & Arnett, 2000; Madrigal, 2000). Kleine *et al.* (1993) established that a social identity perspective is a useful approach to study the many different types of consumption people routinely participate in. In addition, this theory suggests that society is important to the self because the individual is part of a cluster of the population groups that are formed on the basis of common identities. Individuals are more likely to be influenced by perceived expectations of other group members and act in ways that reinforces their membership to the group (Madrigal, 2000). Therefore, whilst the self can be conceptualised as independent, an individual does possess a partially overlapping self. Hence, in a person's sense of connectedness to a cause, event or a sport team, support is reminiscent of Belk's (1988: 139) notion of the "extended self". This perspective suggests that people form emotional attachments to physical possessions, places, people and groups. Thus, acting in ways that promote a groups best interest is based on one's own social identity rather than personal identity (Madrigal, 2000). Individuals may therefore be found playing a distinct role and when these roles are personalised they become identities. As social beings, fans have a desire to be with others and behave as members of groups (McDonald *et al.*, 2002) through the socialisation process. They affiliate and maintain association or relations with others in the group (Handy, 1993). In this way they confirm their sense of identity with others who enjoy the same activity. Studies have shown peer and family relations in the sport setting, such as friendship, peer acceptance, family presence and social interactions could motivate an attachment to a sport (Weiss & Duncan, 1992; Jamber, 1999). The social identity theory is therefore utilised to obtain a better understanding of how and why individuals select certain identity related activities, given all the possible alternatives. In addition, the social identity theory suggests that these types of choices can be explained by identity salience (Laverie & Arnett, 2000).

Identity salience is influenced positively by feelings related to identity. Salient identities are those identities that are an important part of who we are and ones we display routinely. These identities are socially derived and require self-expression and positive feelings affirming the

identity (Laverie & Arnett, 2000). Hence, identities insinuate action by definition and “it is through action that role identities are realised and validated” (Callero, 1985: 205). As fan identity becomes more salient, specific fan activities may be acted out more frequently, for example, attending games, watching games on television or following the scores in the newspaper. On the other hand, negative evaluations would shape inappropriate identity performances. In this instance individuals are likely to take steps to improve their performance or abandon their identity.

In addition to, and linked to the social identity theory, a large amount of research has also been cited on fan attachment especially within the context of winning and losing matches (Campbell *et al.*, 2004). These aspects of positive and negative fan behavior are referred to as BIRGing (basking in reflected glory) and CORFing (cutting off reflected failure). The BIRGing effect refers to an individual’s inclination to share in the glory with another person with whom they are in some way associated (Cialdini *et al.*, 1976). In the case of BIRGing, team success and fan association is positive. Fans tend to associate themselves in a positive light with a successful team. After a team wins, the loyal fan will tend to wear the team colours, show off with team logos and take any opportunity to build an association with the team through their behaviour (Campbell *et al.*, 2004). Kimble and Cooper (1992: 305) concur that fans accomplish a feeling of “vicarious achievement” simply through being fans.

In instances of CORFing, the team is unsuccessful and fan associations are correspondingly negative. Fans will tend to dissociate themselves from an unsuccessful team. After a team loses, fans will be less likely to wear the team colours, attend events or outwardly support the team. Providing further support for such outcomes Hirt *et al.* (1992) established that in accordance with the social identity theory, fans’ mood and self-esteem are influenced by the outcome of the sporting event. In addition, Wann *et al.* (1996: 995) noted that the lack of team success over a period of time has been one of the influential reasons in “seising to follow a once-favourite team”.

Hence, this study attempts to explore and combine different streams of research (Trail, *et al.*, 2003; Kwon & Armstrong, 2004; Won & Katamura, 2007) in order to enhance the understanding of the points (dimensions) of attachment regarding fan attendance measures in rugby games. These researchers have suggested that there may be other factors that influence people’s decision concerning sport consumption behaviour such as strong psychological connections (attachments) with a team, coach, players, university, community, level of sport and the type of sport.

PROBLEM STATEMENT

Not all consumers are equally passionate and fanatical, nor use their team to confirm their personal identity (Stewart *et al.* 2003). All consumers are not totally loyal or engrossed in a team clubs history. Some attend games on a regular basis, while others attend only on special occasions. Some display their fandom by watching pay television channels. Whilst the desire to understand the behaviour of sport consumers has been a long standing goal for sport marketers in other countries, there is little evidence of such research within a South African context. No scale has thus far been adapted or developed which takes into account the unique attendance factors of South African rugby fans. Furthermore, scales developed in other

countries were sport specific, for example, for basketball, baseball, softball and football and tested mostly in the United Kingdom (UK) and United States (US). Therefore, studies that focus on identifying South African fans are required with regard to various sport events. Discerning sport fans attachment and their behaviour is important to sport marketers (Hunt *et al.*, 1999). Such assessments are pertinent in order to make sense of fans disparate behaviour in specific sport events in order to facilitate the implementation of relevant marketing strategies.

PURPOSE OF THE STUDY

The purpose of the study was to identify specific points (objects) of attachment that influence fan attachment in rugby. The secondary purpose of the study was to use the identified scale items to examine the relationship between the a priori factors (points of attachment) on fan attendance.

METHODOLOGY

In conceptualising the purpose of the study, the following framework in the research design was followed. The design details the procedures followed in eliciting the required information with reference to the compilation of the sample, questionnaire construction and data collection in order to determine the dimensions of fan attachment.

Sample composition

Both male (n=137) and female (n=43) fans in various age categories (under 20 years; 20-29 years; 30-39 years; 40-49 years; 50-59 years; 60 years and over) were chosen as respondents (N=180) from a Gauteng based provincial team. The situational variable (geographical distance) was suited for determining motives for fan attendance since a wide variety of the different segments of the population groups and fans from different suburbs of the province (South, Central, Northern Gauteng) frequent these games. Whilst the Gauteng province provides a greater number of teams with a large fan base, it was decided not to extend the study to fans of other provincial rugby teams as this would dilute the number of fans in different categories with reference to fan typologies if spread over a number of teams. In addition, concentrating on specific teams allows for specific marketing communication and segmentation strategies to be developed for the management of the team (Fink *et al.*, 2002; McDonald *et al.*, 2002). This procedure was used by Laverie and Arnett (2000).

Data collection

Respondents were interviewed before the game in the parking lot and at the entrance before entering the stadium. The goal was to make sure that the sample was representative of the fans who attended the games. Every second person or group entering the stadium was chosen for the interview in order to ensure randomness. Home games were only used as the survey location due to cost constraints and that previous research studies showed that these games are good predictors of fan attendance and behaviour (Mahony *et al.*, 2002). Postgraduate Sport Management students, Marketing Research students and students who were affiliated with a university campus rugby team were used as fieldworkers. Potential respondents were

approached and asked if they would be willing to participate in the study. In order to reduce the potential influence of others who accompanied the respondent (children, friends, family, working colleagues), those agreeing to participate were asked to step away from the group and were requested to complete the questionnaire on their own. No more than one person in a group was invited to complete the questionnaire. The questionnaires were completed in the presence of the fieldworkers. Interviewers were required to ensure that they interviewed both male and female fans and different age groups. Of the uniform questionnaires (N=216) administered, data was obtained from 180 respondents since 36 questionnaires were incomplete and could not be used in the analysis.

Item generation and measuring instrument

Three stages were used in the generation of the variables and factors to be included in the current study in the compilation of the scale. First, an analysis was undertaken of previous studies on attachment and identification of sport fans in order to establish consistently supported factors that influence fan attendance. The fan attachment scale for the study was drawn from previous research (Mahony, *et al.*, 2002; McDonald *et al.*, 2002; Trail *et al.*, 2003). The study used a common approach involving a series of Likert scaled anchored questions ranging from 7= strongly agree and 1= strongly disagree (Mahony *et al.*, 2002). Some factors were excluded because of a weak support in past research or not relevant to the study. For example, the factor, affiliation to the university (Trail *et al.*, 2003) was excluded as the team was not affiliated to a particular university. Second, the author examined other factors which would be appropriate to be included within the context of the study. This was established from a review of literature on fan attendance and attachment. Finally, a pilot-test of 40 respondents who attend the team games was conducted to investigate the initial reliabilities of the scale. Initial pre-testing is common on the refinement of such scales (McDonald *et al.*, 2002; Won & Kitamura, 2007). Several items were dropped due to low item-to-total correlations. At this point in the pilot-test, the goal was to retain a rich and diverse set of items. Where necessary some of the items were reworded that had low item-to-total correlations.

RESULTS

The empirical results presented in this section comprise the following steps. The characteristics of the sample are reported, followed by the results of the factor analysis of the various dimensions of attachment. Fan profiles, independent sample t-tests were conducted between the points of attachment and age categories of respondents. Regression analysis was undertaken to establish significant relationships between the five extracted dimensions with frequency of attendance and length of time being a fan.

Sample characteristics

The participation profile of the sample comprised 76% males (n=137) and 24% females (n=43). Married respondents constituted 51.7% (n=93) and single respondents constituted 48.3% (n=87) of the sample. The sample distribution regarding the age categories were as follows: under 20 years, 5.6% (n=10); 20-29 years, 37.8% (n=68); 30-39 years, 25.6% (n=46); 40-49 years, 18.9 (n=34); 50-59 years, 8.9% (n=16); and 60 years and over, 3.33% (n=6). The majority of the respondents, 77.8% (n=83) attended the games with friends or

family, whilst 5% (n=9) attended the games alone and others, 17.1% (n=31) attended the games with their boyfriends or girlfriends. A large majority of respondents were whites (98%). In terms of the frequency of games attended, 46.7% (n=84) reported attending the games three times or less in the season, 38.9% (n=70) attended the games between four to seven times in the season and 14.4% (n=26) attended the games more than eight times in the season. In terms of the length of time respondents were fans of the team, the majority 58.9% (n=106) were fans for over eight years, 11.7% (n= 21) for two years and under and 29.4% (n=53) were fans between three to eight years.

Factor analysis

A common factor route with varimax rotation was used to extract factors (Britsow & Schneider, 2003). Prior to factor extraction the Bartlett's test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was conducted to establish whether the factor analysis procedure was appropriate for the data set. The Bartlett's test of Sphericity was significant at $p < 0.000$ inferring that the data set was not an identity matrix with zero correlations thus, suitable for factor analysis. The KMO measure of sampling adequacy was 0.828, also inferring that the data was suitable for factor analysis. The percentage of variance explained, the scree plot and eigen value criterion guided the extraction of factors. In addition, Churchill *et al.* (1974) also suggested that items that load heavily on more than one factor should be eliminated from further scale development. Hence, cross-loading were also examined in the factor structure. Five items were eliminated because of cross loading as such cross-loading suggests that the item may be incapable of differentiating between factors. This procedure resulted in the extraction of five meaningful factors, which were labelled as team, player, sport, coach and level of sport attachment. Table 1 summarises the factor structure and psychometric evaluation of the scale.

TABLE 1: FACTOR LOADING MATRIX AND PSYCHOMETRIC EVALUATION OF THE SCALE

Scale item no	Factor 1 Team attachment	Factor 2 Player attachment	Factor 3 Sport attachment	Factor 4 Coach attachment	Factor 5 Level of sport attachment	Scale item mean	Item-to-total correlation	Alpha if item deleted
Team criticism – feel insulted	.789	.027	.173	.016	.090	84.91	.589	.877
Personal interest in team	.565	.190	.108	.037	-.172	84.92	.416	.883
We say 'we' rather than 'they'	.718	-.029	.117	.169	.120	84.35	.555	.878
Praise for the team	.740	.030	.188	.146	-.014	84.44	.580	.878
Team is ridiculed – feel insulted	.743	.032	.190	-.039	-.025	84.76	.517	.880

Scale item no	Factor 1 Team attachment	Factor 2 Player attachment	Factor 3 Sport attachment	Factor 4 Coach attachment	Factor 5 Level of sport attachment	Scale item mean	Item- to-total correlation	Alpha if item deleted
Reminds me of who I am	.834	.085	-.054	.104	.008	85.31	.569	.878
Team used to describe myself	.810	.000	.033	.116	.140	85.30	.586	.878
Team disbanded – be at a loss	.732	-.015	.094	.140	.090	84.96	.540	.879
Feel less like myself-by non-attendance	.602	.217	.248	.024	.028	85.76	.553	.879
Consider myself a fan	.119	.804	.024	.031	.087	86.09	.413	.883
Have favourite player/s	.106	.826	.028	.207	.059	86.18	.466	.881
Favourite player left out	.016	.867	.003	.043	.030	86.58	.349	.885
Favourite player is important to me	.027	.853	.020	.100	.190	86.86	.422	.883
Big fan of coach	.196	-.005	.188	.842	.120	85.84	.460	.881
Follow the coach	.167	.215	.116	.888	.023	86.41	.501	.880
Fan of team because of coach	.085	.375	.041	.569	.310	86.85	.457	.881
Fan of rugby as a sport	.158	-.100	.836	.164	.127	83.84	.403	.883
Rugby my favourite sport	.285	.069	.874	.033	.119	84.01	.527	.879
Fan of rugby at all levels	.254	.112	.774	.168	.237	84.07	.570	.878
Support rugby in general	.021	.240	.160	.150	.838	85.25	.397	.883
Fan of rugby and team	.097	.112	.269	.120	.840	84.99	.426	.882
Cronbach α	0.897	0.881	0.856	0.783	0.797			
Rotation: Varimax with Kaiser normalization. Loadings below 0.50 were excluded from analysis Standard overall Cronbach alpha for the scale: 0.89								

Regression

The results of the factor analysis provided empirical support for five factors. Of interest was the relationship between the five factors and fan behaviour. A regression analysis was undertaken between the five factors with frequency of attendance and length of time being a fan. The results of the two regression models are presented in Table 3.

DISCUSSION OF RESULTS

The primary objective of the study was to empirically test a fan attachment scale. The five factors accounted for 69% of the variance, which according to Malhotra (2004) is satisfactory. Factor one, **team attachment** relates to the interest and praise for the team. This factor comprised nine variables and accounted for 32% of the variance. Fans were of the view that if someone ridiculed their favourite team, they felt personally insulted. Variable loadings to the questions from the questionnaire such as "When I talk about this rugby team, I usually say we rather than they", "When someone praises this rugby team, it would feel like a personal compliment", "This team reminds me of who I am", "If this rugby team was disbanded, I would feel like I have lost a little bit of myself" indicates the level of attachment to a team. Consistent with literature, an attachment with a particular team is embedded within the social identity theory where a team's success or failure is interpreted as a personal success or failure (Pooley, 1978; Wann & Dolan, 1994).

Hence, people will engage in activities (Ashforth & Mael, 1989) to support their team, which is in turn congruent to their identity. Funk and Pastore's (2000) study also found that individuals, who rated team importance highly, placed more psychological significance on their relationship with their team.

Factor two, **player attachment** accounted for 16% of the variance and comprised four items. Fans were of the view that they choose a team based on the inclusion of their favourite players and if these players were left out of the selection, they felt that it would have a major impact on the interest of the team. Variable loadings to the questions from the questionnaire such as "I consider myself a fan of certain player(s)", "Having a favourite player is important to me" and "I choose my favourite rugby team based on the presence of my favourite rugby player(s)" suggests that rugby fans draw the level of attachment to the sport from individual players as well. Factor three, **sport attachment** comprised three variables and accounted for 10% of the variance. Variable loadings to the questions from the questionnaire such as "First and foremost, I consider myself a rugby fan", "Rugby is my favourite sport" and "I am a rugby fan at all levels" affirm a fan's attachment to rugby in general. Fisher and Wakefield's (1998) study found that personal relevance to a particular object is an essential feature of identifying with the sport. This personal relevance is referred to as domain involvement and refers to a particular field (type of sport). Nakazawa *et al.* (1999) established that fans attended games because of their attachment to the sport.

Factor four, **coach attachment** comprised three variables and accounted for 7% of the variance. Variable loadings to the questions from the questionnaire such as "I am a big fan of the coach", "I follow the coach in all his decisions and coaching styles", "I am a fan of this team because of the coach" affirm a fan's coach attachment. Factor five, **level of sport**

attachment comprised two variables and accounted for 4% of the variance. Fans attach themselves to a particular sport based in the heightened level of the sport in general.

Profiling rugby fans

In sport academic literature, profiling is usually taken to mean the process whereby the fans are divided into distinct groups (Hoek *et al.*, 1996). In many sport research on fans, simple behavioural analysis is often used to profile fans. Based on Quick's (2000) fan typology, rugby fans in the current study were assigned to one of three fan profiles based on the proportion of home games attended, into die-hard fans, submissive fans and fair weather fans or theatre-goers. Their characteristics were clustered according to how they described themselves from a list of characteristics provided. Die-hard fans made up 14% of the sample, submissive fans comprising 39% of the sample and fair weather or theatre-goers made up 47% of the sample.

Die-hard fans expressively supports the team, are fanatics, draw a large amount of interest and excitement for the team, develop strong association with the team and rugby as a sport, with players and attend more home games. They are generally season ticket holders. They are team loyalist, dubbed as 'regulars' and spend money on paraphernalia in order to associate with the team. Submissive rugby fans are strongly committed and they identify mostly because of cultural and ethnic traditions of rugby. They are social fans and like the excitement in the games and especially watch a closely contested game. Submissive fans do not overtly express their association with a team like the die-hard fans and are more likely to make a last minute decision to go to a game. However, their attendance is not as frequent compared to a die-hard fan. The fair weather or theatre goers are committed casuals who associate with the game for the excitement value and attend games to see some of their favourite players. They attend games because of good weather and on special occasions (e.g., their company purchased tickets for them) (Garland *et al.*, 2004).

In addition to establishing the fan profiles, independent sample, *t*-tests were used to examine whether there were any significant differences among the age groups and their attachment to team, players and the coach of the team. The results are reported in Table 2. Only those points of attachment that showed significant differences are reported for the sake of brevity.

TABLE 2: EXAMINING DIFFERENCE AMONG AGE GROUPS AND POINTS OF ATTACHMENT

Points of attachment/ and age	Significance	t-value
Player attachment with age categories <20 years (\bar{X} =3.2); age 50-59 years (\bar{X} =2.8)	0.016	0.691
Coach attachment with age categories <20 years (\bar{X} =3.4); 50-59 years (\bar{X} =2.9)	0.021	0.740
Player attachment with age categories 20-29 years (\bar{X} =4.4); 40-49 years (\bar{X} =3.4)	0.040	0.156
Significant at p<0.05 level		

Fans under 20 years of age were more likely to be attached with their favourite player and the coach compared to those fans who were 50-59 years of age. Those fans that were between 20-29 years of age were more likely to be attached to individual players compared to those fans

who were 40-49 years of age. It therefore seems that the younger fans had a greater propensity to be attached with individual players and the coach of the team than older fans in rugby.

Regression analysis using the enter method was used to test two regression models presented in Table 3. The results of the first regression model indicated that approximately 9% of the variance in frequency of attendance of home games was explained by team attachment, player attachment, sport attachment, coach attachment and level of sport attachment. An assessment of the t-values for the partial regression coefficients indicated that attachment to the sport in general contributed significantly to the regression equation ($t=2.536$; $p<0.05$). Coach and level of sport attachment were negatively related in predicting fan attendance. An examination of the beta (β) weights indicated that sport attachment ($\beta = 0.223$) explained most of the variance, followed by team attachment ($\beta = 0.153$) and player attachment ($\beta = 0.035$). Coach attachment ($\beta = -0.113$) and level of sport attachment ($\beta = -0.158$) showed negative relationships with frequency of attendance of home game matches.

The results of the second regression model also indicated that approximately 9% of the variance in length of time being a fan was explained by team attachment, player attachment, sport attachment, coach attachment and level of sport attachment. The t-values for the partial regression coefficients indicated that attachment to the sport in general contributed significantly to the regression equation ($t=2.950$; $p<0.05$). Player, coach and level of sport attachment were negatively related in predicting fan behaviour. Examination of the beta (β) weights indicated that sport attachment ($\beta = 0.258$) explained most of the variance, followed by team attachment ($\beta = 0.033$). Coach ($\beta = -0.105$), player ($\beta -0.108$) and level of sport attachment ($\beta = -0.163$) showed negative relationships with the length of time being a fan.

TABLE 3: SUMMARY OF REGRESSION ANALYSIS FOR FAN ATTACHMENT WITH FREQUENCY OF ATTENDANCE AND LENGTH OF TIME AS A FAN

Frequency of attendance (predictor variable)						Length of time as a fan (predictor variable)					
Dimension	SE B	(β)	R ²	t-value	Sig	Dimension	SE B	(β)	R ²	t-value	Sig
Team	0.045	.153	.036	1.847	.067	Team	.068	.033	.004	.403	.687
Player	0.036	.035	.038	.438	.662	Player	.051	-.108	.035	-1.359	.176
Sport	0.045	.223	.052	2.536	.012*	Sport	.066	.258	.058	2.950	.004*
Coach	0.046	-.113	.068	-1.327	.186	Coach	.064	-.105	.073	-1.242	.216
Level of sport	0.040	-.158	.086	-1.859	.065	Level of sport	.054	-.163	.092	-1.914	.057

* Significant at $p<0.05$ level

The correlation matrix was also examined for existence of multicollinearity, i.e. if the predictor variables correlates too highly ($r>0.9$) with each other (Field, 2005). None of the

correlations reached a value of $r > 0.9$. In further examining the presence of co-linearity in the data set, the variance inflation factor (VIF) was used and the following recommendations (Field, 2005: 196) were applied:

- if the largest VIF was greater than 10 then there was a cause for concern;
- tolerance level below 0.1 indicated a serious problem; and
- tolerance below 0.2 indicated a potential problem.

Assumptions of the multiple regressions were checked along with co-linearity diagnostics provided by Statistical Package for Social Sciences. In all cases the two regression models were appropriate for the data as the VIF ranged from 1.47 to 1.21 and the tolerance statistics for the five factors ranged from 0.969 to 0.693 inferring that there was no co-linearity within the data.

In summary, attachment with rugby as a sport appears to be the strongest predictor of fan attendance. Weak relationship between team, player, coach attachment and fan attendance emerged in this study which is consistent with previous research (Nakazawa *et al.*, 1999). Within the context of this study, weak relationships may be attributed to the perception that rugby is still the domain of the White population group, which has not yet pervaded other population groups in South Africa despite the attempts of the South African Rugby Union to make the game for all South Africans, mainly through active participation and development programmes throughout the country. Mahony *et al.* (2002) observed some logical explanations for these weak relationships. Firstly, the result does not suggest that these forms of attachment are negatively related to the decision to attend home games; fans have an attachment but these forms of attachment do not influence their decision to attend the games. Such forms of attachment may be linked to being a fan; yet still following the player, team or coach by watching television or other forms of the media. Secondly, while player and team coach attachment does not lead to high frequency of attendance, a strong attachment to the sport is necessary for rugby fans to keep coming back. In addition, coaches often change and having attachment to a coach may have no bearing on fan attendance. Stewart *et al.* (2003) accentuates that the relationship between various forms of attachment and fan attendance is complicated by the fact that individuals bring their own personalities and values to their sport experience. Moreover, fans are subject to a broad range of external factors that mediate their relationship with their favourite team and players. Such factors may include the family structure, culture, household incomes, friendship groups, the social milieu in which sport consumers run their lives, their sensitivity to price, transport and the cost of activities (Fort, 2003). These fundamental factors may influence the fan base and attachment to a sport.

Reliability

As suggested by Churchill *et al.* (1974) the internal consistency of the items included in the fan attachment scale was first evaluated. The resultant coefficient alpha of 0.89 indicated that the scale items performed adequately in capturing the elements of fan attachment. As suggested by Churchill (1979), the internal consistency of the fan attachment scale was further examined by calculating the coefficient alphas for each factor of the scale. The results are shown in Table 1. All five factors were above the benchmark level of 0.70 (Nunnally & Bernstein, 1994).

CONCLUSION AND IMPLICATIONS FOR FUTURE RESEARCH

The five points of attachment, namely: team attachment; player(s) attachment; sport attachment; coach attachment; and level of sport attachment sub-scales, which were adapted for rugby from various different codes of sport from other countries, provides preliminary evidence for the reliability of a rugby fan attachment scale. The regression models indicated that attachment to rugby as a sport appeared to be correlated to and significantly predicted fan attendance. Overall, the results of the regression analysis lead to two conclusions. Three of the five dimensions of attachment included in the study did not appear to contribute to being strong predictors of fan attendance. The usefulness of each dimension may vary depending on other factors that may influence fan attendance.

Satisfaction is often used in predicting fan attendance (Laverie & Arnett, 2000). Future research should include satisfaction in predicting fan attendance. It is also possible that future research could use different variables that would capture fan attachment. Research efforts should also examine teams in other geographic areas and across different sports. Although this study represents an important step towards understanding fan-related behaviour, future researchers need to employ and test multiple constructs in their exploratory model to yield a deeper understanding of fan attendance. For example, motivation factors and social connections could be included in future studies to predict fan attendance. Consumer research has suggested that media information influences fan attendance (Kleine *et al.*, 1993), which can also be an important avenue for further research as many fans follow televised matches or reported accounts of games in the newspapers or on the Internet. Since weak relationships were found between four of the five dimensions of attachment and measures to establish fan attendance, further research including other variables, for example, a combination of motivational variables, purchases of season tickets, safety and security, overcrowding and atmospherics may provide fertile grounds for further research. As the purpose of the study was initially to establish and validate various points or objects of attachment, the study did not delve into the issue of culture, ethnicity and race. Since a large majority of respondents were classified as White, it was not possible to conduct an analysis of fan attendance using race categories. These dimensions may yield pertinent revelations in terms of rugby consumption behaviour within a South African context.

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(Subject editor: Prof. W. Hollander)