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**Understanding Sports Spectators' Motives for  
Attending Live Events: A Study of Darts Fans in the UK**

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## **Abstract**

Modern sports organisations operate in a crowded leisure market, and must apply sophisticated marketing techniques in order to survive. Sports fans are motivated to attend events for a variety of reasons, and understanding these motivations is critical to sports marketers. Previous research has highlighted the importance of studying fan motivation on a sport-by-sport basis. While much has focused on mainstream team sports, comparatively little is known about fans' motives for attending less popular, individual sports.

This research investigated the motives of fans of darts in the UK. In contrast to many sports, two governing bodies administer darts: the BDO and PDC, and the research required that data were gathered from events organised by each of these bodies. A modified version of Wann's (1995) Sport Fan Motivation Survey (SFMS) was distributed at both the BDO British Classic, and the PDC World Matchplay in July 2008, and elicited 104 responses. Analysis of these responses showed that darts fans are primarily motivated by entertainment, and that group affiliation, eustress (positive stress), self-esteem, and appreciation of players' skills are also important to them. Escape from everyday life, family bonding, and the opportunity to gamble were shown to be relatively unimportant. These results differ from previous studies of fans of individual sports.

Fans differ in their level of involvement and identification with their favourite sport, and motives may differ for fans with different levels of identification. Positive relationships between fan identification with the sport of darts and

four motivational factors were identified, and it is suggested that sports marketers use identification as a grouping variable when segmenting the darts consumer market. Few differences were found when fans were grouped by gender or by a stated preference for the BDO or PDC.

The research has significant implications for sports marketers working in the field of darts, and suggestions for marketing campaigns are included. Furthermore, PDC events are shown to be more popular than BDO events, suggesting that the BDO must devise new marketing strategies to survive.

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## 1. Introduction

Professional sport is now a significant industry (Beech & Chadwick, 2004; Trail et al., 2003; Westerbeek & Smith, 2003) and accounted for 3% of UK consumer expenditure in 2001 (Trenberth & Garland, 2006). The advent of new technologies, such as the Internet and cable and pay television platforms, have created conditions that have allowed many established sports organisations to dramatically increase revenues, and provided a platform for emerging and traditionally less popular sports to increase their fan base and attract sponsorship (Kim et al., 2008; Sandvos, 2003).

Sports organisations now operate in an increasingly crowded market. In addition to rival sports organisations, a plethora of other leisure alternatives, for example video games, multiplex cinemas, and rock and pop concerts, compete for customers (Beech & Chadwick, 2006; Shank, 1999). Therefore, it has become widely accepted that it is no longer feasible for sports organisations to rely on the *“if we build it they will come mentality”* (Trenberth & Garland, 2006, p92), where high levels of fan equity, identification and loyalty were deemed sufficient for retaining customers and attracting spectators to events (Beech & Chadwick, 2004). Non-capacity crowds are a common occurrence for many sports events, including for some of the world’s most popular sports leagues and competitions, such as Major League Baseball in the US and the FA Cup, English football’s most prestigious knockout competition (Trenberth & Garland, 2006; Symanski, 2001).

Rather, sports organisations must adopt *“the application of techniques and strategies evident in the majority of modern business operations”* (Hoye et al, 2006, p4) to survive. This includes developing a strategic approach to the marketing of sports products and services (Beech & Chadwick, 2006; Shank, 1999). Satisfying the needs of customers is at the heart of marketing for any business (Beech & Chadwick, 2004). Therefore, one of the most important factors of marketing for a sports organisation that relies on attracting people to attend live events is gaining an understanding of the benefits they seek to derive from doing so (Beech & Chadwick, 2004).

It is widely agreed that sports fans cannot be considered a homogenous mass; all of who share the same interests and are motivated to attend events for the same reasons (Quick, 2000; Shank, 1999; Wann et al., 2001). This means that a single marketing strategy that attempts to cater for the needs of all sports fans is highly unlikely to be successful (Hunt et al., 1999; Trenberth & Garland, 2006). For example, marketing strategies aimed at promoting a wholesome family atmosphere may appeal to young families seeking entertainment, while it would fail to attract fans motivated by the opportunity to see their favourite player or team win.

Therefore, one of the most important elements of strategic sports marketing is segmentation, which is defined as *“identifying groups of customers based on their common needs”* (Shank, 1999, p198). By conducting thorough market research to identify the needs and behaviour of different groups of customers, sports organisations are able first to determine which group of customers

represents the best sales opportunities, and then devise strategies that cater to the needs of that group (Trenberth & Garland, 2006; van Leeuwen et al., 2002; Shank, 1999). However, sports organisations have been traditionally poor at applying effective segmentation techniques, and as a result have missed opportunities to both retain existing customers and grow their fan base (Beech & Chadwick, 2006). Identifying the correct way to segment a market is time consuming, expensive and “*requires extensive market research and data collection*” (Harris & Elliot, 2006, p127). It has been argued that sports organisations have failed to allocate sufficient resources to marketing campaigns because of this (Harris & Elliot, 2006).

While conducting market research is undeniably time consuming, sports organisations’ marketing failures have also been attributed to a lack of understanding of what motivates fans to attend events (McDonald et al., 2002). The utility and importance of understanding fan motivation has been demonstrated for popular team sports (Won & Kitamura, 2007; Funk et al., 2002), established individual sports (Daniels & Norman, 2005; Robinson et al., 2004) and emerging sports (Kim et al., 2008).

This research investigates the sport of professional darts. In recent years, the darts has attracted record crowds in the UK (Newman, 2008). The purpose of this research is to identify the factors that motivate darts fans to attend darts tournaments. To do so, surveys were conducted at two, televised ranking darts events: the BDO British Classic and PDC World Matchplay. The research paper is structured as follows:

Chapter 1 contains a brief history of the sport of darts, with particular emphasis placed on the creation of a new governing body in the early 1990's, which has profoundly affected the sport's administration. Chapter 2 examines the literature concerning sports fan motivation. Various academic models and frameworks used to identify fan motivation are discussed, the different factors that motivate fans to attend events elucidated, and the relationships between motivation and team, sport and player identification, demographics, type of sport and national cultures identified. Chapter 3 delineates the methodology adopted for the research, including an analysis of the merits and weaknesses of survey administration methods. Chapter 4 presents the results of the survey. Chapter 5 contains a discussion of the results, including comparisons with the findings of previous studies. Finally, Chapter 6 concludes the findings and discusses their implications for sports marketers. The limitations of the research are highlighted and future research opportunities suggested.



## 2. The Sport of Darts

### 2.1. History

Darts is one of the most popular participation sports in the UK and also one of the oldest (Chaplain, 2005). While it has been played for many centuries (BDO, 2008 [1]), it was played under different rules and using different boards until 1924, when the NDA (National Darts Association) was founded and standardised national rules and regulations introduced (Chaplain, 2005).

The first national championship, sponsored by the *News of the World* newspaper, was staged in 1927 in London and by the 1930s the championship attracted over 280,000 entrants (Chaplain, 2005). The NDA was disbanded during World War II, and no national governing body controlled the game until 1954, when the National Darts Association of Great Britain (NDAGB) was formed (Chaplain, 2005). However, the *News of the World* championship was revived in 1947 and continued to be one of the most popular darts tournaments until the early 1990s (Chaplain, 2005; Waddell, 2007).

While the participation in the sport remained high throughout the twentieth century, with formalised county leagues being established in the 1950s and 1960s, its emergence as a spectator sport was precipitated by appearance on television (Waddell, 2007). Although darts was first televised in the 1960s, it was not until the early 1970s, with the emergence of new broadcasting technologies that allowed split-screen views (where both player and board could be seen on screen at the same time), that the game became a popular

spectator sport. The British Darts Organisation (BDO) replaced the NDGAB as the game's national governing body in 1973 and oversaw the creation of the first world championship events - the Winmau World Masters in 1974 and the Embassy World Championship in 1978 (Chaplain, 2005). These events are still considered the most prestigious BDO tournaments, and have survived to this day.

By the late 1970s and early 1980s the worlds best darts players, for example Eric Bristow, John Lowe and Jockey Wilson, had become household names (Chaplain, 2005; Waddell, 2007) and the BBC's coverage of the Embassy World Championship consistently attracted large television audiences throughout this period, with 8.3 million people watching the 1983 final between Eric Bristow and Keith Deller (Waddell, 2007).

## *2.2. The World Darts Council and Sky Television*

However, by the late 1980s darts was in a period of decline. This was largely due to policy changes at the BBC and ITV, the sole broadcasters of televised darts. The BBC decided to cut back its broadcasting of 'minority' sports, while ITV eschewed darts coverage in favour of sports that would attract audiences from higher income groups (Waddell, 2007). The number of televised tournaments dropped from 14 to 2 in a two-year period between 1988 and 1990, and prize monies had halved between 1985 and 1990. World champions were not the household names they once were, which detrimentally affected the income they were able to accrue from appearing at darts exhibitions (Waddell, 2007).

Despite the impact of policy changes at the terrestrial television broadcasters, “*there was a strong feeling that a large portion of the blame [for the decline of darts] had to be laid at the door of the BDO*” (Waddell, 2007, p180). The world’s top players and their representatives felt that the BDO had failed to adequately promote the game and had allowed it to stagnate. In 1991, sixteen of the world’s top players formed a rival organisation, the World Darts Council (WDC), which was designed to both promote the sport’s elite players and to raise its profile to somewhere near to the level it had reached a decade earlier (Waddell, 2007). WDC players continued to compete in BDO events, but the organisation began hosting its own tournaments in 1993 and, following the BDO’s decision to ban all WDC affiliated players from BDO events, finally broke away from the BDO completely in 1994 (Waddell, 2007).

Since this, the WDC (now the Professional Darts Council (PDC)) has continued to grow. Sky TV began broadcasting WDC events in the early 1990s and began to change the way the sport was televised. Sky was able to allocate more airtime to events and higher production values meant that events could be designed specifically to attract television viewers. Sky’s coverage, which featured rock-music, camera shots of the crowd, and glamorous models, made the BBC’s coverage of the sport appear “*pastel pale and very old fashioned*” (Waddell, 2007, p197).

The prize money available for PDC tournaments now far outstrips that available to BDO affiliated players. For example, the total prize money for the

2008 PDC world championship was £605,000 versus £243,000 for the BDO's version and is set to rise to £1million by 2010 (PDC Official Website, 2008). As a consequence, the PDC has continued to attract the most proficient players from the UK and around the world (White, 2007). Several of the BDO's highest profile players; including six of its world champions (Mark Webster, Steve Beaton, John Part, Ritchie Burnett, Jelle Klaasen and four times champion, Raymond van Barneveld), have 'defected' to the PDC.

Many of the televised PDC events have also attracted record crowds (Wilson, 2008; Newman, 2008). The PDC Premier League (a weekly tournament comprising 15 televised rounds and featuring the world's top six players and two wildcard entries) has sold out large venues, such as the Wembley Arena, and the Liverpool Echo Arena (Wilson, 2008).

It has been claimed that PDC events have attracted darts fans that previously did not attend live darts tournaments. This has been attributed to the way in which both Sky TV and the PDC have promoted its events (Wilson, 2008). Barry Hearn, the chairman of the PDC since the mid 1990s, was recently quoted as saying,

*“we used to reckon that most of our audience were people in the 45-50 age range. They were darts players. The average age of the audience here is 20-25. These people don't play darts. They come here”* (Newman, 2008).

### **3. Literature Review**

The motivation of sports fans is a relatively new and emerging field of study, but has attracted significant attention from scholars in recent years (Funk et al., 2003; Shannon, 1999). While some research focuses on factors not directly related to the actual consumer, such as quality and accessibility of stadia and a team's win-loss record (Wakefield & Sloan, 1995; Bristow & Sebastian, 2001; Wakefield & Blodgett, 1996), much is geared towards understanding the psychological benefits that sports fans seek to derive by attending live sports events.

#### *3.1 Sports Fans' Motives*

There is general agreement in the literature that sports fans are motivated by a vast range of different psychological and social needs (Kim et al., 2008; Won & Kitamura, 2007; Sutton et al., 1997). While different authors use different terms, some consensus on a broad categorisation of many of these is evident in the literature. These are briefly summarised below:

*Eustress* - Several studies have revealed that some sports fans seek the physiological stimulation (eustress) that results from watching a sporting event (Wann, 1995; Trail & James, 2001; McDonald et al., 2002). The excitement of watching a sports event arouses the senses and creates a feeling of physiological wellbeing (McDonald et al., 2002).

*Self-esteem* - Many sports fans' self-esteem is boosted by a sense of accomplishment when their favourite team or player is successful (Wann,

1995; van Leeuwen et al., 2002). Often referred to as basking in reflected glory (BIRGing) (Robinson & Trail, 2005), this need for a sense of vicarious achievement has been claimed to be a particularly important factor for attracting some 'casual' followers of teams to attend matches. Fans that may not typically attend matches are more likely to do so when their favourite team or local team achieves success (Hunt et al., 1999; Sutton et al., 1997). However, BIRGing is not limited to fans of team sports. Increased attendance at the Formula 1 British Grand Prix has been attributed to the success of Lewis Hamilton, a British racing driver (Brit Sport Weekly, 2007).

Self-esteem is also achieved through skill transference. Here, spectators believe that observing high quality participants, acquiring knowledge and using this to improve their own performance will enhance their own sporting abilities (McDonald et al., 2002; Trail & James, 2001).

*Entertainment* - Fans seeking entertainment from sporting events are more motivated by the opportunity to see a high quality contest than to watch a victory for a particular team or athlete (Hunt et al., 1999; Funk et al., 2003). Here, spectators seek the same benefits as they would from a trip to the cinema or theatre and, as such, are more likely to consider a trip to a sporting event as one choice among many leisure options (Tapp & Clowes, 2000; Wann 1995).

*Aesthetics* - Some fans are attracted to a sporting event because of the high levels of skill and competence shown by the participants, or the grace and

beauty inherent in an athletic performance (Trail & James, 2001; Funk et al., 2001). While this may be particularly important to fans of sports with a highly artistic focus, such as figure skating or rhythmic gymnastics, appreciation of the aesthetic qualities of less obviously stylistic sports can also be observed (Wann et al., 2008). For example, football has been referred to as “the beautiful game” (Conn, 2004) and “the working man’s ballet” (Tapp & Clowes, 2000).

*Escape from everyday life* – Sports spectatorship is also cited as a means by which fans can escape the boredom of daily life, serving as a distraction and diversion from everyday worries, thus reducing stress levels (Robinson et al., 2004; Wann, 1995; McDonald et al., 2002). Wann et al. (2008, p6) claim that the importance of this to any one fan is likely to change depending on personal circumstances, stating, “*the use of sport as an escape may be particularly prevalent during personally difficult and/or stressful times*”.

*Social facilitation* - Sutton et al. (1997) contend that while in many areas of society people are becoming increasingly disconnected from a sense of community, this is not true for sports. Therefore, sport spectatorship provides a rare opportunity for social bonding. While many authors cite social facilitation as an important motivational factor (McDonald et al., 2002; Robinson et al., 2004), for some (Wann, 1995; Trail & James, 2001) this has two distinctly different elements: group affiliation and family bonding.

Fans motivated by group affiliation seek to strengthen and maintain social links through the shared experience of attending a sports event, and engaging in social discourse relating to their favourite sport or team (Wann et al., 1998). Those motivated by family bonding are attracted to sports events because they provide the opportunity to spend time with family members (Wann, 1995; Funk et al., 2003).

These two motives may appear to be similar, but making a distinction between them may be crucially important to sports marketers. The practical value of understanding fan motivation is to use the information to segment fans into groups with common properties and target these groups with marketing campaigns (McDonald et al., 2002; Robinson et al.; 2004; Wann, 2008). Marketing campaigns designed to attract families may require vastly different approaches to those attempting to attract groups of friends or fans seeking an atmosphere conducive to socialising.

### *3.2. Measuring Sports Fans' Motives*

Several scales have been developed to capture and measure these motivational factors. One of the earliest of these is the Sport Fan Motivation Scale (SFMS), which captures eight motivational factors (eustress, self-esteem, escape from everyday life, entertainment, economic factors, aesthetics, group affiliation and family needs) using 23 Likert scale questions (Wann, 1995). Trail & James (2001) raised questions concerning the SFMS' validity and in response developed the Motivation Scale for Sport Consumption (MSSC). The MSSC features 9 factors (vicarious achievement,



acquisition of knowledge, aesthetics, social interaction, drama, physical attractiveness of the participants, escape, family, and physical skill of the participants) (Trail & James, 2001). However, despite Trail and James' criticisms of the SFMS, subsequent studies have shown it to be an internally reliable and valid scale (Wann et al, 2008; Bristow & Schneider, 2003; Daniels & Norman, 2005).

The Sport Interest Inventory (SII) developed by Funk et al. (2001), contains similar factors to those measured by the SFMS and MSSC. It contains items such as aesthetics, entertainment, and vicarious achievement, but was augmented in 2003 to include contextual factors specific to a particular sport (in this case women's football). Women's football fans considered a family friendly atmosphere to be important, so 'wholesome environment' was included. It was also noted that female athletes are seen to provide a positive example to young children, particularly when compared to their male counterparts. This was important to fans with young families, so 'positive role models' was also added to the scale (Funk et al., 2003).

McDonald et al. (2002) capture motivational factors for both sports fans and participants. Here, they use Maslow's hierarchy of needs construct to form the basis for developing their scale. They propose that sports fans are motivated by four of the five basic human needs identified by Maslow (physiological, social, esteem, self-actualisation) and measure 12 variables associated with these needs. These are: risk taking (physiological, self-esteem), stress reduction (physiological, self-esteem), aggression (physiological), affiliation

(social), social facilitation (social), self-esteem (esteem), competition (esteem), achievement (esteem), skill mastery (esteem), aesthetics (esteem), value development (self-actualisation), and self-actualisation. Safety, the fifth human need, cannot be satisfied through sports fandom (McDonald et al., 2002).

Examination of the different scales reveals that despite a broad consensus on many fan motives, there are some variables that are unique to each scale. However, many of these could be considered as sub items of the above categories. For example, McDonald et al. (2002) include risk-taking and aggression, both of which could be described as sub categories of eustress (McDonald et al., 2002), while the SSI contains vicarious achievement and national pride, which both relate to self-esteem (Funk et al., 2002).

Many authors ignore the opportunity to gain financially from placing wagers on events as a motivating factor for fans. (Funk et al., 2004; Kim et al., 2008; McDonald et al., 2002). However, it is possible to gamble on many sports and for some, such as horse racing, gambling is important to many spectators (Brindley & Thorogood, 1998). It has been questioned whether people whose main reason for attending events can be considered as fans in the traditional sense, as they may not support a particular team or identify with an individual athlete (Wann et al., 2008). However, "*they still receive a great deal of enjoyment from being a sports fan*" Wann (1995, p378). Furthermore, studies that do consider this factor (Wann et al., 2002; Wann et al., 2008) have revealed it as a strong motivator for many spectators. Therefore, using either

the MSSC or SII, both of which exclude economic factors, to study fans of a sport that provides opportunities to gamble may fail to capture all of the pertinent motivational factors for these fans.

The work of Brindley & Thorogood (1998) provides some support for this criticism. Here, the authors demonstrate the importance of gambling on horse races for spectators at Newbury racecourse in England. They show that excitement and entertainment are important motivational factors for young race goers, but placing wagers on races considerably heightens these. Furthermore, winning bets is cited by those surveyed as the most enjoyable part of the event. Such results indicate that the 'economic factors' variable should be included in studies of fan motivation.

### *3.3. Identification*

Identification is defined as *"the personal commitment and emotional involvement customers have with sports organisations"* (Sutton et al, 1997, p15) and it has been claimed that this strongly influences motivation (Daniels & Norman, 2005; Hunt et al., 1999; van Leeuwen et al., 2002). As fans become more involved with a sports organisation, they develop a sense of belonging in its community. The sports organisation becomes an increasingly important part of a fans' sense of self and they begin to express their identity to others in terms their support of and involvement with it, for example, by wearing replica team shirts or using language associating them with the team, such as "we won". (Quick, 2000; Basil & Brown, 2005; Hunt et al., 1999). As

identification increases different motivational factors can increase or decrease in importance (Robinson & Trail, 2005; Hunt et al., 1999).

For example, identification has been shown to have a high degree of influence on the behaviour and motivations of English football fans (Hunt et al., 1999). Strongly identified fans are more likely to be motivated by self-esteem and often cite seeing their team win as more important than watching entertaining or attractive football, whereas weakly identified fans are more likely to be motivated by entertainment and less concerned by team performance (Tapp & Clowes, 2000).

These results have been replicated for fans of American team sports. Robinson et al. (2005) demonstrate that identification with an American college sports team, university and/or community is negatively related to appreciation of the aesthetic qualities and drama of a sporting contest, while it is positively related to the desire for vicarious achievement. Therefore, as with English football fans, highly identified fans of American college sports value winning far more highly than they do an entertaining or attractive game (Robinson & Trail, 2005).

Highly identified fans are more likely to be motivated by self-esteem (Funk & James, 2004). As their favourite team, sport or player becomes more central to their identity, the sense of achievement and accomplishment gained when they perform well becomes greater (Wann et al., 2002; Sutton et al., 1997). However, unlike less identified fans, who may exhibit CORFing (cutting off

from reflected failure) and cease to attend matches when their favourite team or athlete performs poorly (Hunt et al., 1999), highly identified fans are motivated to continue to attend matches by a combination of other factors.

For example, higher levels of eustress are also reported as identification increases (Daniels & Norman, 2005; Branscombe & Wann, 1992; Wann et al., 2002). While having highly identified, loyal fans can provide positive benefits for sports organisations; such as consistently high attendances and increased merchandise sales (Tapp & Clowes, 2000), highly identified fans motivated by eustress are more likely to exhibit aggressive and sometimes violent behaviour (Branscombe & Wann, 1992). Hunt et al. (1999) support this contention. They segment English football fans based upon their level of team identification. They identify 'the dysfunctional fan' who "*uses being a fan as the primary method of self-identification*" (Hunt et al., 1999, p446) and because of this engages in anti-social behaviour, such as racist, nationalistic chanting, and hooliganism.

Group affiliation is also positively correlated with identification. It has been claimed that as identification increases, "*an individual is not just a member of the fan group. The individual now thinks of him/herself as a member of the team*" (Funk & James, 2004, p11). This perception is strengthened by affiliation with other fans with the same views and values (McDonald et al., 2002). Wann (1995, p378) notes the positive psychological effects this can have, claiming, "*The self-esteem benefits of sport fandom can be independent*

*of success and, rather, result from feelings of identification and belongingness”.*

These self-esteem benefits associated with group affiliation are not limited to fans of sports teams. In addition to this, fans may also identify with a particular sport (Green, 2001; Daniels & Norman, 2005). Each sport has its own unique subculture, which has distinctive cultural norms and values (Green, 2001) and *“as one adopts the values and beliefs of a subculture, one’s identity becomes more closely associated with the subculture”* Green (2001, p5). Fans participate in a sport’s subculture in a variety of ways; including attendance at events, watching games on television, purchasing merchandise and through discussing games with friends. As fans interact more with sports’ subcultures, they *“develop a sense of identification with the activity, and may incorporate the activity into the self-concept”* (Green, 2001, p5).

Few studies have investigated the influence of identification with a sport on motivation (Wann et al., 2002). Daniels and Norman (2005) are critical of this and modified the SFMS to include this dimension. This was used to determine the motivations of fans attending horseracing events in the US. The results provided support for the view that fans identify with sports’ subcultures, showing a significant positive relationship between identification with the sport and four (eustress, self-esteem, entertainment, aesthetics) out of seven (economics was excluded for political reasons) motivation variables (Daniels & Norman, 2005).

Other dimensions of identification (points of attachment) have also been identified. Sports fans may also identify with an individual player, coach, institution (e.g. a university or section of the armed forces) or community (Robinson & Trail, 2005; Robinson et al., 2004). Sports fans often demonstrate high levels of identification for individual players from their own country, regardless of the team they represent. For example, Chinese basketball star, Yao Ming's recent success in America's NBA has raised the league's profile in China and also engaged the support of American born Asians (Wang, 2004). It is claimed that these fans support the player, rather than the team because *"as a 'Chinese' player, Yao stands for China and Asian Americans"* (Wang, 2004, p265). The fans see the player as an extension of themselves. His status as a star within the game is perceived to reflect positively on their culture and ethnicity. This is seen to be particularly important for fans of Asian origin, because Asians have often been negatively stereotyped as naturally weak athletes (Wang, 2004).

Other sports leagues and clubs have managed to capitalise on player identification. Hong et al., (2005) have shown that interest in individual players has increased the profile of Major League Baseball in Japan since a number of Japanese players joined the league in the 1990s. Also, European football clubs have managed to increase exposure and market share in Asia by signing popular Asia players. The interest from Chinese fans in Everton FC, an English football team, increased dramatically when it signed Lie Tie, the Chinese player of the year. Every Everton match was broadcast in China during the player's tenure at the club and it secured lucrative sponsorship

deals from Chinese companies as a result (Manzenreiter & Horne, 2007). Also, AS Roma's capture of Hidetoshi Nakata, Japan's most famous footballer, dramatically increased the Italians club's fan base in the country (Hase, 2002).

High levels of player identification are not peculiar to Asian sports fans. The sale of European football club merchandise in Brazil has been attributed to *"the typical Brazilian pride that we have when we see our stars playing victoriously in the most important leagues on the planet"* Alvito (2007, p540).

A study of golf fans in America revealed that fans not only identified with individual players, but also with different golf tours (Men's - PGA, Ladies - LPGA and Senior's - Senior PGA). Despite this, there was no significant relationship between motives and identification with a tour (Robinson et al., 2004). These results suggest that identification with players, teams or communities are better predictors of fan motivations than identification with a particular governing organisation (Robinson et al., 2004; Robinson & Trail, 2005).

### *3.4. Demographic Factors*

Gender has been shown to significantly influence motivation. Early work by Wann (1995) showed that *"male fans reported higher levels of eustress, self-esteem, escape, entertainment, and aesthetic motivations"* (Wann et al., 1999, p116), while females were more highly motivated by the opportunity for family bonding. Economic factors and group affiliation were shown to be the



same for males and females (Wann, 1995). However, these results were from data collected at university campuses and, as such, represented a homogenous sample (Wann, 1995). Replication of the research using a more heterogeneous sample produced slightly different results (Wann et al., 1999). No significant gender differences were found for entertainment, while males reported higher levels of economic and group affiliation motives. All other results pertaining to gender from the 1995 study were replicated (Wann et al., 1999).

Weight has been added to the contention that motivation is influenced by gender and/or gender role orientation (*"the degree to which individuals view themselves as masculine, feminine or androgynous"* Wann & Waddill (2003, p485)) by several studies (Dietz-Uhler et al., 2002; James & Ridinger, 2002; Wann & Waddill, 2003; Kwon & Trail, 2001), all of which have produced similar results to Wann et al. (1999).

Robinson & Trail (2005) present some evidence refuting this. They found that there was no significant relationship between gender and motives. However, they do note that these inconsistencies with other studies may be due to the instruments and analysis techniques used and concede that further investigation into the subject would be required to confirm their findings. They conclude that future investigations into motivation should continue to test for gender differences (Robinson & Trail, 2005).

Other demographic factors may also influence fan motivation. A comparison of football supporters in Asia showed that Korean supporters were more likely to be motivated by personal benefits (e.g. social interaction and eustress) than Japanese supporters, who were more motivated by factors relating directly to the sport (e.g. entertainment and vicarious achievement) (Won & Kitamura, 2007). Kwon & Trail (2001) add support to the theory that motivation is influenced by nationality and cultural background. They show significant differences between motives for attending collegiate sports events when comparing national and foreign students in an American university.

However, both of these studies show that nationality and culture have a significant relationship with team identification, suggesting a third variable effect. While this does not diminish the potential benefits of segmenting by nationality and culture (Kwon & Trail, 2001), it does suggest that the important relationships are those between culture and identification, and identification and motivation.

Age has been shown to have some influence on motivation (Wann, 1995; Robinson et al., 2004). However, this has been refuted elsewhere. For example, Wann et al. (1998) are unable to replicate earlier results showing a negative correlation between age and group affiliation (Wann, 1995; Wann et al., 1998).

### *3.5. Sport Typologies*

The motivations of fans of many different sports have now been investigated. The majority of these have been mainstream team sports (Daniels & Norman, 2005). These have included football (Hunt et al., 1999; Wann & Kitamura, 2007), basketball (Funk et al., 2003; Trail et al., 2003), American football (Robinson & Trail, 2005) and Cricket (Keunzel & Yassim, 2007).

However, individual sports have also received some attention, with fans of golf (Robinson et al., 2003) and horse racing (Daniels & Norman, 2005) amongst those studied. Research has also been conducted into fans of less traditionally popular sports, such as mixed martial arts (Kim et al., 2007) and emerging means of fandom, such as participation in fantasy sports leagues (Farquhar & Meeds, 2007).

These different studies have provided strong evidence that motivational profiles differ significantly between sports (Wann et al., 1999; Kwon & Trail, 2001). However, some similarities between different types of sports have also been revealed. For example, research has revealed that eustress is a particularly strong motivational factor for male consumers of violent sports (e.g. American football, ice hockey) when compared to non-violent sports (e.g. baseball, tennis), suggesting that the aggressive nature of some contests engender strong feelings of arousal and excitement (Wann et al., 2008; Wenner & Gantz, 1989) and satisfy some fans' appetite for violent contests (McDonald et al., 2002).

Differences are also evident when comparing team and individual sports. Fans of individual sports have reported higher levels of aesthetic motivation than fans of team sports, whereas eustress and escape were higher for team sports (Wann et al., 1999). It has been posited that these differences exist because of qualities inherent in the different types of sport (Wann et al., 2008). For example, individual sports encourage fans to focus on one particular athlete, and many contain a stylistic and interpretive element. A combination of these two factors increases the likelihood that fans of these sports will be motivated by aesthetics (Wann et al., 2008). Furthermore, for individual sports such as tennis, golf and snooker, crowds must be quiet during play, whereas for team sports like football, rugby and ice hockey, crowds often chant or sing in groups (Conn, 2004; Wann et al., 2008). This may explain differences in eustress motives, due to fans being encouraged to contain their excitement when watching individual sports, and group affiliation, as less contact and socialising between fans is possible when silence is required for play (Wann et al., 2008).

However, not all individual sports require silence for play or discourage singing and interaction. Darts, for example, is characterised by bawdy, raucous crowds, where drinking, socialising and singing play an integral part in the supporter experience (Waddell, 2007), while British boxers often have large groups of fans who travel to events together and show vociferous support during bouts (Dirks, 2007; Mulvaney, 2008). Also, fans of motor racing and tennis, both individual, non-stylistic, non-aggressive sports, have been

shown to have vastly different levels of family, aesthetic and group affiliation motivations (Wann et al., 2008).

Furthermore, studies comparing popular team sports have revealed differences in sports that Wann et al. (2008) group together. For example, McDonald et al. (2002) show that fans of ice hockey are motivated by aesthetics much more than fans of American football, whereas group affiliation is more important for American football fans than it is for ice hockey fans. Both of these sports would be categorised as aggressive, non-stylistic, team sports using Wann et al's typology.

This suggests two things: Firstly, that further development of typologies, containing smaller groups of more closely related sports, may be required if they are to provide a useful way of generating hypotheses and theories concerning fan motivation. For example, a category grouping together combat sports, including boxing, mixed martial arts and wrestling may show significant similarities that may prove useful to marketers and event managers (Kim et al., 2008).

Secondly, it shows that while studies considering several sports demonstrate significant differences in spectator motivation profiles depending on type of sport, they do not provide compelling evidence that sport type is sufficient for predicting fan motivation. Each sport has a unique subculture (Green, 2001) and, as such, *"fans can be differently motivated based on both the specific*

*sport under consideration as well as the sport type”* (Daniels & Norman, 2005, p202).

Furthermore, evidence has been presented showing different motivational profiles for fans of men’s teams and women’s teams playing the same sport (Kahle et al., 2001; Funk et al., 2003), different teams playing the same sport in different countries (Wann & Kitamura, 2007) and sports teams playing at different strata of a sport’s structure (McDonald et al., 2002). This shows not only that motivational profiles may be different for similar types of sport, but also for fans of different leagues, tours, teams or competitions within a specific sport.

Therefore, in order to paint a fully accurate picture for marketers seeking to use the results as the basis on which to segment sports fans, studies of fan motivation should be conducted on a sport-by-sport basis (Kim et al., 2008; McDonald et al., 2002) and investigate the influence of different points of attachment (i.e. whether a fan identifies with a team, sport, player, community or particular tour or organisation) on fans’ motives for attending the sport in question (Robinson et al., 2004; Daniels & Norman, 2005).

### *3.6. Research Questions*

The purpose of this research is to investigate the motivational profiles of darts fans. The above literature review and current status of the sport of darts raises four research questions to address this purpose:

*Research Question 1:* What motivates darts fans to attend live darts events?

*Research Question 2:* Do darts fans' motives for attending live events vary depending on their levels of identification with the sport or individual players?

*Research Question 3:* Do darts fans' motives for attending live events vary depending on their gender?

*Research Question 4:* Do darts fans' motives and levels of identification vary depending on a stated preference for either BDO or PDC events?

## 4. Methodology

### 4.1. Data Instrument

The vast majority of previous studies into fan motivation have used self-administered surveys as the primary data collection instrument (Daniels & Norman, 2005; Wann, 1995; Kim et al., 2008; Robinson et al., 2004). It was decided that this method would be used for the current study.

Where possible, researchers designing self-administered surveys should adopt previously used questionnaires that have been tested both for reliability and clarity (Borque & Fielder, 2003). Where questions used in previous studies are not directly applicable to the survey, they should be adapted if possible. This both maximises the clarity of questions and allows for comparisons between studies (Borque & Fielder, 2003).

Many questionnaires have previously been designed for the study of sports fan motivation and identification, so it was decided that one of these should be adopted for the study of darts fans. Due to the fact that it has been demonstrated that Wann's SFMS "*could be reliably modified to reflect a specific sport*" (Daniels & Norman, 2005, p208), it was modified to collect data specific to the sport of darts. As per Borque's and Fielder's recommendations, questions were adapted for the study, but retained much of their original language. For example, '*making wagers is the most enjoyable aspect of being a sports fan*' were changed to '*making bets is the most enjoyable aspect of being a darts fan*'.



Previously modified versions of the SFMS (Kwon & Trail, 2001; Daniels & Norman, 2005) had excluded some of its original questions. For example, Daniels & Norman (2005) excluded economics questions because gambling was a politically sensitive subject at the location of the study when the survey was administered, while Kwon & Trail (2001) removed the family subscale, due to the study being conducted at a university where most students' families were not present.

The current study did not require the removal of any of the SFMS subscales. Therefore, all 23 Likert scale items were included in the version of the SFMS that was modified for darts fans. This meant that data for all eight of the motivational factors (eustress, self-esteem, escape from everyday life, entertainment, economic factors, aesthetics, group affiliation and family needs) identified by Wann could be captured (see Appendix A).

The SFMS was further modified to include information pertaining to identification. Kwon & Trail (2001) had previously added questions concerning identification to the SFMS. However, these relate to team identification (for example, *"I would support the football team regardless of whether they won or lost"* (Kwon & Trail, 2001, p151)), and were deemed to be inappropriate for this study. Daniels & Norman (2001) had also included identification questions in the SFMS. As these related to an individual sport, they were considered to be a more accurate representation of the factors that determine identification with an individual sportsman or with a sport itself. Modified versions of these four Likert scale questions were included in the survey. For example, *'How*

*strongly do you see yourself as a fan of equestrian events'* was changed to *'How strongly do you see yourself as a fan of darts'* (see Appendix B).

In order to determine whether preference for either the PDC or BDO had any relationship with motivation, two further items were added to the survey. These captured whether fans had a preference for attending either PDC or BDO events, and whether they had a preference for watching either on television. Whether the questionnaire was completed at a BDO or PDC event was also recorded.

Finally, two demographic variables were captured by the questionnaire. Respondents were asked to provide both their gender and age. Previous studies have shown gender to have a significant impact on motivation (James & Ridinger, 2002; Wann & Waddill, 2003). Age was included, due to the inconclusive nature of the previous studies' findings regarding the impact of age on both motivation and identification. Also, these factors were included to determine whether any significant demographic differences could be observed between spectators at PDC and BDO events.

#### *4.2. Data Collection Options*

Choosing the most efficient means for distributing surveys and determining which of these is most likely to produce accurate results is *"one of the most far-reaching decisions a researcher must make"* (Fowler Jr., 2002, p58). de Vaus (1996) identifies three options that are generally available for administering questionnaires: by mail, by telephone or by conducting face-to-

face interviews. A fourth option, online distribution via the Internet, has become more popular in recent years (Borque & Fielder, 2003; Fowler Jr., 2002). Each method has different strengths and weaknesses and these must be assessed according to the characteristics of the survey. Several factors must be considered before choosing the most appropriate administration method (Borque & Fielder, 2003; de Vaus, 1996).

#### *4.3. Practical Considerations*

One of the most important factors when choosing one of the four available methods is the potential costs associated with each (Fowler Jr., 2002). Borque & Fielder (2003) estimate the costs of distributing surveys by mail to be 50% lower than those administered by telephone, and 75% lower than those administered in person. The Internet is generally the least expensive administration option, although it may require some investment in software if distributing surveys via email, or payment of hosting costs if using a website (Fowler Jr., 2002; Borque & Fielder, 2003).

Usually, the costs of conducting face-to-face interviews are significantly higher than for other methods, both in terms of out of pocket travelling expenses and man-hours (Oppenheim, 1992; Fowler, Jr., 2002). This has been cited as a major reason why many researchers eschew this method (Borque & Fielder, 2003). However, these costs can sometimes be mitigated depending on the nature of the survey (de Vaus, 1996). If the target sample is likely congregate in one place at one time, for example, a sports stadium on matchday, shopping centre on the first day of the sales, or a theatre on opening night,

fewer staff and less travel may be required to conduct the necessary interviews (Oppenheim, 1992; Borque & Fielder, 2003). Despite this, the costs of conducting face-to-face interviews relative to other methods are still high and because of this *“a researcher must address directly the question of why an interviewer-administered survey cannot be carried out by telephone”* (Fowler Jr., 2002, p75).

Other practical problems may be posed if using face-to-face administration methods. It has been claimed, *“by far the most serious problems of the face-to-face interview are related to its implementation”* (de Vaus, 1996, p111). This is because face-to-face methods are the most labour intensive and therefore often require a large, competent staff (Fowler Jr., 2002; Oppenheim, 1992). Obtaining such a staff is often problematic and, where less competent staff must be used, response rates may be lower and the quality of data collected compromised (de Vaus, 1996). Telephone surveys may also require a large staff, but closer supervision is possible when interviews are conducted from a central location (de Vaus, 1996). Mail or Internet administered surveys require the smallest staff. It has been claimed that one or two people with strong clerical skills can administer even very large surveys using these methods (Fowler Jr., 2002; de Vaus, 1996).

A further practical disadvantage associated with face-to-face interviewing is the time required to obtain data (de Vaus, 1996). Administering questionnaires via the Internet, the postal service or the telephone is often considerably faster, as these methods require no travel and can be conducted

from a central location (Fowler Jr., 2002; de Vaus, 1996). However, collecting data by conducting face-to-face interviews is often slowed if respondents are located in several different areas. If they can be accessed at a single location, speed is significantly improved and, due to the fact that data are gathered on-site, can be faster than when administering surveys by mail or the Internet (Borque & Fielder, 2003).

#### *4.4. Response Rates*

Failure to collect data from a high percentage of a survey's target sample can introduce errors into the results obtained (Schuman & Presser, 1996; Moser & Kalton, 1983). Non-respondents to questionnaires often have different demographic profiles than respondents (de Vaus, 1996; Oppenheim, 1992). For example, people for whom English is a second language or older people have been shown to be less likely to complete surveys (de Vaus, 1996).

Although a low overall response rate may not necessarily indicate that certain segments within the population are disproportionately represented, it is highly likely that bias, and therefore serious inaccuracy, will be introduced into the results of a survey as a result. Low response rates are often most problematic for mail or Internet administered surveys (de Vaus, 1996; Fowler Jr., 2002). The lack of interviewer supervision when using these methods may exclude those who fail to properly understand the questions, have visual impairments, or suffer from dyslexia (Moser & Kalton, 1983; de Vaus, 1996). Also, people with a strong interest in the subject of the survey are more likely to complete mail-administered survey than those who have not (de Vaus, 1996).

Although it has been claimed that following certain procedures, such as the use of advance letters and follow-up interviews, can mitigate the problems of low response to mail and Internet administered surveys (Schuman & Presser, 1996; Fowler Jr., 2002), studies have revealed that mail surveys, offering no incentives for their completion, have an average response rate of approximately 20% (Borque & Fielder, 2003). The response rate for online surveys is even lower, ranging, on average, from 10% to 20% (Borque & Fielder, 2003).

In contrast, response rates for telephone and face-to-face surveys are generally much higher - a well-administered survey using face-to-face interviews as the primary means of data collection can result in response rates of above 85% when the topic is of particular interest to the population surveyed (de Vaus, 1996).

#### *4.5. Obtaining Representative Samples*

While a high response rate can reduce the possibility of bias being introduced into the results, it does not guarantee that the target population is accurately represented (de Vaus, 1996; Borque & Fielder, 2003). Bias can also be introduced by problems associated with availability and accessibility of respondents (Oppenheim, 1992). For example, surveys conducted on weekdays during office hours may introduce bias into the results by excluding a high percentage of employed people, or surveys conducted in cities may fail to garner responses from those dwelling in rural areas (Fowler Jr., 2002).

To reduce bias that may be introduced through either refusals or failure to survey a representative sample, researchers “*must have some control over who completes the questionnaire*” (de Vaus, 1996, p108). They must be as certain as possible that the person intended to complete the questionnaire actually did so, that questionnaires are available to all of the target respondents and, in the case of online surveys, that they are only submitted once (Oppenheim, 1992; Borque & Fielder, 2003).

Face-to-face interview and telephone interview methods allow a far greater degree of control than postal or online surveys (de Vaus, 1996; Borque & Fielder, 2003). Postal surveys present a number of problems with obtaining a representative sample. They often require that respondents be selected from some sort of list, for example, a telephone directory. These lists are rarely comprehensive and can often be out of date, which can result in surveys failing to reach a high proportion of the population (Oppenheim, 1992; de Vaus, 1996). Furthermore, researchers have no means of being completely certain that the intended target completed questionnaires that are returned (de Vaus, 1996).

Acquiring a representative sample becomes somewhat easier when using face-to-face methods. This allows researchers to approach people who satisfy the target requirements of the study. Borque & Fielder (2003, p145) note that this is particularly important for populations that do not have characteristics that are common in the general population, “*This survey method* [face-to-face

interviews] *is often the only efficient means of obtaining information from somewhat rare populations*".

For example, if the subject of interest were theatregoers' motives for attending West End theatre productions, conducting interviews during the interval of a play would be the optimum way to ensure responses are obtained from an appropriate sample. This is termed 'convenience sampling' and can "*eliminate the need for surveyors to go to overwhelming effort, at high cost, to locate random types particular types of individuals within the general population*" (Borque & Fielder, 2003, p145)

#### *4.6. Data Quality*

While a low response rate and failure to obtain a representative sample will produce results that cannot reliably be generalised, low quality data gathered from those that do respond can be equally problematic (Oppenheim, 1992; Moser & Kalton, 1983). High quality data is that which most accurately reflects respondents' honest opinions. Quality can therefore be compromised if people give what they perceive to be socially desirable answers to survey questions, which may be contrary to their own views on the subject (Borque & Fielder, 2003; de Vaus, 1996).

It has been posited that while respondents may give socially acceptable rather than true opinions regardless of the survey administration method, this is most likely to occur when face-to-face with the interviewer (de Vaus, 1996). Poorly trained interviewers who are unaware of this can affect the quality of data by



revealing their personal opinions, and thus unduly influence the answers (Oppenheim, 1992; de Vaus, 1996).

However, all available administration methods may present potential data quality problems (de Vaus, 1996). Interviewers can influence telephone interviewees in the same way as those who are the subjects of face-to-face interviews (Oppenheim, 1992). In addition to interviewers affecting the quality of answers, the opinions of other people may also exert influence. For example, due to a lack of interviewer supervision, there is no way of knowing whether respondents to postal or online surveys have discussed the questionnaire with others (Moser & Kalton, 1983).

#### *4.7. Questionnaire Design*

The method of survey administration may also place constraints on the questionnaire design (Fink, 1995). Complex questions may require explanation and questions may need to be answered in a certain sequence (Moser & Kalton, 1983). Therefore, the use of mail or Internet surveys may necessitate reducing complexity (Borque & Fielder, 2003).

Even relatively uncomplicated questionnaires benefit from being administered using face-to-face or telephone administration methods. It has been demonstrated that respondents are less likely to become bored by questionnaires when speaking to an interviewer. This means that the chances of all answers being completed are higher, and allows questionnaires

administered by interviewers to be longer and more involved than those administered by post or the Internet (Borque & Fielder, 2003).

#### *4.8. Administration Method*

After the available options were assessed, it was decided that the most appropriate method for administering the modified SFMS was to conduct face-to-face interviews during live darts events. Although the costs associated with this method are generally believed to be higher than for others, and the survey was conducted on a strict and limited budget, the concentration of the intended sample in one location meant that no extra interviewers were required. Out of pocket travelling expenses were deemed to be reasonable and the overall cost of collecting the data was not high.

Obtaining a representative sample was the main reason for choosing face-to-face interviews. The target population had very specific characteristics and therefore telephone, mail or Internet administration methods were considered to be inefficient options. Significant efforts would have been required to gain access to darts spectators without attending events and it was believed that it would not have been possible to ensure a representative sample, by, for example, requesting responses from web based darts fans' forums or advertising in darts magazines, as this would potentially have only elicited responses from the most committed of darts fans. Furthermore, it has been claimed that research into sports fan motivation should ideally be conducted at live events because the optimum means of gaining insight into consumer behaviour is to observe consumers in naturalistic settings (Funk et al., 2003).

The nature of sports means *“sport consumers are more accessible in naturalistic locations than customers in general product categories”* (Funk et al., 2003, p202).

It was hypothesised that fans with a preference for either the PDC or BDO may have different motivational profiles. Therefore, conducting the research at a single location may have introduced a bias into the results. Furthermore, as one of the research questions was concerned with identifying these differences between fans of BDO and PDC events, obtaining a representative sample required that data be collected from two locations - one PDC and one BDO event. Therefore, surveys were conducted at two high profile televised darts events, both of which took place in July 2008. These were the BDO British Classic, and the PDC World Matchplay. Prior to conducting the surveys, permission to distribute questionnaires was obtained from executives at both locations: the Kettering Conference Centre (BDO British Classic) and the Winter Gardens, Blackpool (PDC World Matchplay).

In order to obtain the most representative sample possible, spectators in different seat locations, bar areas, queues and smoking areas within each venue were asked to complete the questionnaire. Due to the fact that the nature of darts tournaments allows several breaks in play, it was possible to reduce the possibility of refusals by not approaching fans during play. Neither venue restricted access to any of these areas. No inducements were offered for completing the questionnaire.

Although the interviewer had little experience of conducting face-to-face surveys, steps were taken to ensure data quality was as high as possible. Opinions were not offered and when explanations of questions were required, they were provided in as unbiased a way as possible.

#### *4.9. Sample*

104 questionnaires were completed, 50 during the BDO British Classic in Kettering and 54 during the PDC World Matchplay in Blackpool. Although refusals were not logged, few of the darts fans approached declined to complete the questionnaire (less than five in Kettering and less than ten in Blackpool), so it was assumed unlikely that any bias was introduced into the sample due to refusals.

Of those who completed the questionnaire 66 (63.5%) were male and 38 (36.5%) were female. The median age group was 26 – 35, which comprised 36.5% of the sample. No respondents were under the age of 16, and only one over the age of 65. 16.4% percent of respondents were aged between 16 and 25 years, 24% aged between 36 and 45 years, 14.4% aged between 46 and 55, and 7.7% aged between 56 and 65.

#### *4.10. Data Analysis*

Prior to addressing the research questions, the internal reliability of the SFMS motivation constructs was analysed with “*the widely used Cronbach’s Alpha test*” (Bryman & Cramer, 1997, p62). Here, the groups of questions relating to a single motivational factor (for example, three questions measure eustress)

were tested to ensure they consistently measured the same idea. This test was also applied to the group of four identification questions.

Descriptive statistics were used to analyse darts fans motivations across the entire surveyed population. As many previous studies (Wann et al., 2008; Kim et al., 2008; Wann et al., 1998) have simply reported the mean value of each motivational factor, this was deemed sufficient for the current study.

In order to determine whether a stated preference for either BDO or PDC events was related to differences in motivational profiles, independent samples t-tests were conducted to determine whether a significant difference was found between the two for each of the eight factors. Gender differences were tested in the same way.

Finally, linear correlation analyses were performed to test for the existence and strength of any relationship between identification and each of the motivational factors measured by the SFMS. Microsoft SPSS, a statistical analysis package, was chosen as the means for analysing the results of the survey.

#### *4.11. Internal Reliability of the SFMS*

It has been recommended that a rule of thumb for internal reliability should be a Cronbach's Alpha result of 0.70 or above (Kim et al., 2008; Funk et al., 2003). Initial tests revealed that five (Group affiliation, Escape, Eustress, Economic, Self-Esteem) of the eight motivation scales were internally

consistent. The four questions used to measure identification also demonstrated internal consistency (See Table 1).

Cronbach's alpha - internal reliability tests				
	Initial Test		Revised *	
Scale	Items	Alpha	Items	Alpha
Group Affiliation	3	0.816		
Escape	3	0.931		
Eustress	3	0.754		
Family	2	0.648		
Aesthetic **	3	0.556		
Economic	3	0.935		
Entertainment	3	0.518	2 ***	0.809
Self-Esteem	3	0.852		
Identification	4	0.827		

Table 1: Internal Reliability

\* Re-tested after erroneous items removed

\*\* Subscale found to be internally invalid after re-test

\*\*\* Question, 'To me, darts is simply a form of recreation' removed

Further analysis of the 'Entertainment' scale revealed that reliability was compromised by one of the questions: *"To me, darts is simply a form of recreation"*. Removal of this item, leaving two questions relating to entertainment, resulted in a Cronbach's alpha of 0.809, suggesting that the removed question was measuring a different concept.

In contrast to entertainment, it was not a single erroneous item that compromised the reliability of the aesthetics scale. When initial tests revealed a low Cronbach's alpha, further tests were conducted comparing each possible combination of two of the three questions. These all produced similar results and, therefore, the SFMS was deemed to unreliably measure darts fans' levels of aesthetic motivation, and this scale was excluded from further analyses.

Finally, although the 'Family' scale was shown to have a Cronbach's alpha that fell below the rule of thumb (alpha= 0.648), it was decided to include this in the analysis. Previous studies have included items with lower alphas, for example, Wann et al., (1995), includes family when the Cronbach's alpha was shown to be 0.63. However, it was decided that only tentative conclusions should be drawn from analysis involving the family scale.

## 5. Results

Research question 1 addressed the motives of darts fans. Entertainment ranked significantly above all other motives as the predominant reason that darts fans attend live events (mean = 7.01). The least important factor was economic (mean = 2.06). Group affiliation (mean = 5.84), eustress (mean = 5.74), and self-esteem (mean = 5.39) were also shown to be strong motivational factors. Escape (mean = 3.65) and family (mean = 3.28) were shown to be relatively weak motivational factors. Although aesthetics was excluded from the analysis, one of the questions measuring this related directly to appreciation of professional darts players' skill.

Studies using scales other than the SFMS have revealed this to be an important motivational factor for sports fans (Trail & James, 2001). For example, Robinson et al. (2003) use the MSSC, which includes 'physical skills' as a separate scale to 'aesthetics', to study golf fans' motives. The three questions associated with this scale score highly for many golf fans (Robinson et al., 2003). It was therefore believed that measuring darts fans' motivations to see highly skilled players might produce insightful results. Therefore, the question *"One of the main reasons I watch darts is because of the high levels of skill shown by the players"* was analysed and produced a mean of 6.05.



	GA	ESC	EUS	FAM	AES *	EC	ENT **	S-E	PSK	IDT	n
Entire Sample	5.84	3.65	5.74	3.28	3.89	2.06	7.01	5.39	6.05	5.69	104.00
Male Fans	5.63	3.75	5.95	2.89	3.93	2.47	6.95	5.60	6.05	5.81	66
Female Fans	6.21	3.48	5.37	3.97	3.81	1.36	7.11	5.04	6.05	5.48	38
Difference (Male-Female)	-0.58	0.27	0.58	-1.09	0.13	1.11	-0.15	0.55	-0.01	0.33	-
t-statistic	0.115	0.519	0.66	0.024	0.648	0.001	0.459	0.151	0.98	0.303	-
PDC Preference	6.04	3.89	5.87	3.00	3.83	2.01	7.02	5.56	5.81	5.59	62
BDO Preference	5.35	3.78	6.09	4.30	4.35	1.83	7.15	5.78	6.74	6.51	23
Difference (PDC-BDO)	0.69	0.11	-0.22	-1.30	-0.52	0.18	-0.13	-0.22	-0.93	-0.92	-
t-statistic	0.11	0.827	0.525	0.23	0.118	0.633	0.591	0.662	0.003	0.11	-

Note: All subscale scores range from 1 (low motivation) to 8 (high motivation).  
GA - Group Affiliation, ESC - Escape, EUS - Eustress, FAM - Family, AES - Aesthetics, EC - Economics, ENT - Entertainment, S-E - Self-Esteem, PSK - Player Skills, IDT - Identification  
\* Aesthetics not considered due to lack of internal reliability  
\*\* One question removed from 'Entertainment' to ensure internal reliability

Table 2: Motive Scores

Research question two was concerned with establishing whether there is any relationship between identification and each of the SFMS' motivation scales. The results suggest that those darts fans that attend events tend to be highly identified with the sport (mean = 5.69). Table 3 shows that statistically significant linear correlations were observed between identification and four of the motivation scales.

	GA	ESC	EUS	FAM	AES *	EC	ENT **	S-E	PSK
Pearson Correlation	-0.093	0.239	0.552	0.242	0.167	0.61	0.151	0.665	0.441
IDT Sig. (2 tailed)	0.348	0.015	0	0.013	0.91	0.536	0.125	0	0

GA - Group Affiliation, ESC - Escape, EUS - Eustress, FAM - Family, AES - Aesthetics, EC - Economics, ENT - Entertainment, S-E - Self-Esteem, PSK - Player Skills, IDT - Identification  
\* Aesthetics not considered due to lack of internal reliability  
\*\* One question removed from 'Entertainment' to ensure internal reliability

Table 3: Correlation between identification and motives

Moderate, positive relationships were found between identification and eustress ( $r = 0.552$ ,  $p = 0$ ), and identification and self-esteem ( $r = 0.665$ ,  $p = 0$ ). Weak, positive relationships were observed between identification and escape ( $r = 0.239$ ,  $p = 0.015$ ), and identification and family motives ( $r = 0.242$ ,  $p = 0.013$ ).

Identification was shown to have no statistically significant relationship with entertainment ( $r = 0.151$ ,  $p = 0.125$ ), economic ( $r = 0.61$ ,  $p = 0.536$ ), or group affiliation ( $r = -0.093$ ,  $p = 0.348$ ).

Analysing the question addressing player skill once again provided potentially useful results. A moderate, positive relationship was observed between identification and appreciation of the high levels of skill shown by professional players ( $r = 0.441$ ,  $p = 0$ )

Research question 3 addressed whether a relationship between gender and motives existed. Independent t-tests suggest that economic motives were significantly higher ( $t = 3.466$ ,  $p < 0.01$ ) in the case of men (mean = 2.47) than

in the case of women (mean = 1.36). Also, family motives were significantly lower ( $t = -2.292$ ,  $p < 0.05$ ) for men (mean = 2.89) than for women (mean = 3.97).

Although male and female respondents reported some slight differences in other motivational factors, for example men reported higher levels of self-esteem motivation (mean = 5.60) than women (5.04), no significant relationship was observed between gender and any other motives (See Table 2).

The final research question attempted to determine whether any significant differences in motivational profiles could be observed between fans expressing a preference for either BDO or PDC events. 23 respondents expressed a preference for attending BDO events (22.1%) and 62 for attending PDC events (59.6%).

Table 2 shows that while some differences were observed between the mean answers of these two groups, for example fans that prefer PDC events reported higher group affiliation scores (mean = 6.04) than those preferring BDO events (mean = 5.35), these differences were not statistically significant.

One significant difference that was observed was that appreciation of players' skills ( $t = 3.075$ ,  $p < 0.003$ ) was higher for fans that prefer BDO events (mean = 6.74) than for those that prefer PDC events (mean = 5.81).

## 6. Discussion

The current investigation was intended to extend previous research into sports fan motivation and identification by focusing on the sport of professional darts. The study offers a number of useful extensions to these fields by: (a) demonstrating that further augmentation of the SFMS is required to apply it to the study of darts fans, (b) elucidating the motivational profile of darts fans, (c) showing that identification has a significant impact on some, but not all, motivational factors for darts fans, (d) highlighting that gender is significantly related to some motives, and (e) demonstrating that preference for a particular governing body's events appears to have little impact on darts fans' motives. Each of these is addressed below:

### 6.1. *The SFMS*

Although previous studies have shown the SFMS to be a reliable instrument for measuring sports fan motivation, the analysis revealed three problems. Firstly, the wording of one of the questions relating to entertainment (*"To me, darts is simply a form of recreation"*) necessitated its removal from the analysis. The reasons that this question produced slightly erroneous results are unclear, but it may be that darts fans are more sensitive to any criticisms of the sport that it implies than fans of other, more established sports. Darts has only recently won recognition from the sports councils of Great Britain and Northern Ireland as a bona-fide sport, rather than just a game or pastime (BDO, 2008 [2]). It may be that the question is seen by darts fans to imply that darts is not an important professional sport with a relevant subculture, but just

a game or “*simply a form of recreation*”. Further investigation would be required to determine whether this is the case.

Appreciation of the aesthetic qualities of a sport has been shown to be important to fans of individual sports. Unfortunately, internal reliability issues with the SFMS prevented accurate measurement of this motive. However, analysis of the responses revealed two interesting outcomes. Firstly, appreciation of the skill demonstrated by the players scored highly, suggesting that this is important to darts fans. This finding supports some of Trail & James’ (2001) criticisms of the SFMS and suggests that a scale that relates solely to appreciation of players’ skills, as per the MSSC, should be included in future data collection instruments applied to the study of darts.

Secondly, and perhaps unsurprisingly, questions relating to the grace and beauty of darts or whether darts could be considered a form of art received low scores. The latter of these two questions received the lowest possible score in the vast majority of cases and where this was not the case often received the highest possible score. The interviewers noted that those who did score that question highly found it amusing that it would be asked in the first place and that their answer may not reflect their true opinion.

Finally, although it was decided to include the family scale in the analysis, this produced a Cronbach’s Alpha score that was slightly below the accepted rule of thumb for acceptable internal reliability. The two questions that measure this motive appear to be measuring slightly different ideas. One relates to the

opportunity to spend time with the family, while the other relates to the opportunity to spend time with a spouse. This means that fans who are highly motivated to attend events by the opportunity to spend time with siblings, their children, or a single parent, but not necessarily a spouse, or vice-versa, may provide significantly different answers to the two questions.

### *6.2. Darts Fans' Motives*

Previous studies have shown that entertainment is consistently the most important motivational factor for fans of a wide variety of different sports (Wann et al., 2008; Daniels & Norman, 2005). This study shows that darts is no different in this respect; entertainment ranked significantly higher than all other motives.

Furthermore, this motive was largely unaffected by identification, gender or preference for the BDO or PDC. Therefore, it can be reasonably assumed that the majority of darts fans are primarily motivated to seek entertainment when attending live events.

However, differences between darts and other individual sports are revealed by the study. Wann et al. (2008) results show that fans of individual sports tend to regard group affiliation (mean = 3.96) as less important than other factors, such as eustress (mean = 5.03) or aesthetics (4.94). Darts fans' high levels of group affiliation (mean = 5.84) is more similar (yet still higher) to those expressed by fans of highly social events, such as American college football (mean = 5.16, (Wann et al., 2008), mean = 5.20, (Robinson & Trail,

2005)) and college basketball (mean = 5.23, (Wann et al., 2008; Robinson & Trail, 2005)).

This may be explained by the peculiar nature of darts. Unlike the majority of sports, darts' modern origins are as a 'pub sport' and, at the amateur level, the majority of teams are still based in public houses (BDO, 2008 [2]). A sociable drinking culture is still evident in the sport (Waddell, 2007) and events are often set up to reflect this. Unlike other individual sports, the seating at many darts events is arranged around large tables, where groups of fans sit and drink together, and large bar areas, where fans congregate during breaks in play, are usually provided.

The high score for eustress motives are also more similar to Wann et al.'s (2008) results for team sports (mean = 5.58) than individual sports (mean = 5.03). This may be due to the fact that darts fans reported high levels of identification and that this is positively related to eustress.

Levels of escape motives showed remarkable similarity to previous studies. The results were exactly the same as Wann's (2008) results for individual sports (mean = 3.65) and very similar to Daniels & Norman's (2005) findings for highly identified horse racing fans (mean = 3.39). This suggests that for fans of many individual sports, this motive will be of similar importance. Furthermore, the results are consistent with previous studies insofar that they demonstrate that escape is of relatively low importance compared to other motives (Kim et al., 2008; Won & Kitamura, 2007).

The relative lack of importance of economic factors and family motives to darts fans also supports previous studies. Economic motivations have been shown to be the least important to fans of a variety of sports, including: baseball, boxing, auto-racing, and ice hockey (Wann et al., 2008). It would appear that these factors will only be relevant for sports where gambling is perceived to be an integral feature of the spectator experience, for example, horse racing or greyhound racing.

### *6.3. Identification and Motives*

Cronbach's alpha tests revealed that fans who were highly identified with the sport of darts also tended to be highly identified with individual players, which may explain the positive correlation between identification and self-esteem. This seems to suggest that highly identified darts fans feel a sense of vicarious achievement when their favourite player succeeds. These results are consistent with the findings of Hunt et al. (1999) and Kwon & Trail (2001). However, they differ insofar as they show high levels of identification with individual players, which has previously been claimed to be less strong than identification with sports teams, due to the fact that *"individuals only compete for a few years, rather than for decades, as is the case with sports teams"* (Wann et al., 2008, p14).

In contrast to many individual sportsmen and women, darts players' careers often span decades (Waddell, 2007). Players often continue to compete past the age of 60 years and players have won major tournaments in their early



20s (Waddell, 2007). Therefore, it is possible that player identification is more prevalent among darts fans, as long-term support of an individual player is possible.

The positive correlation between identification and eustress is consistent with many previous investigations (Wann & Branscombe, 1992; Daniels & Norman, 2005). Wann & Branscombe (1992, p1017) show that “*those [fans] who were highly involved with a group or athlete showed elevated arousal during the competition*”, and the same would appear to be true for fans of darts.

That no correlation was found between identification and entertainment contradicts the contentions of many academics. Several have claimed that as identification increases, and self-esteem and eustress become more important, entertainment will become less so (McDonald et al., 2002; Kwon & Trail, 2001).

However, the current study does not disprove the theory that highly identified fans will be more behaviourally loyal to their sport and therefore less sensitive to varied levels of entertainment than less identified fans (Tapp & Clowes, 2000). If events are poorly managed or contests of low quality, highly identified fans may still attend events because of the opportunity to see their favourite player win and the physiological stimulation associated with watching darts matches (Wann, 1995; Robinson & Trail, 2005; Tapp & Clowes, 2000).

It has also been claimed that group affiliation will increase in importance as fans' identification increases and they become more involved with a sport's subculture (Wann et al., 2008; Tapp & Clowes, 2000). This was not supported by the results, suggesting that while involvement in the subculture of darts may be important to highly identified darts fans, the highly social aspect of darts events is attractive to fans for whom darts has less importance, as it provides the opportunity to spend an evening in the company of friends.

#### *6.4. Gender and Motives*

Although significant differences were found between males and females in economic and family motivations, both of these were still relatively unimportant to each group when compared to other motivational factors. The results would seem to support the findings of Robinson & Trail (2005), where it was claimed that gender has little influence on supporter motives and that other grouping variables should be used for segmentation.

However, differences between other motives were also evident in the data. As only 38 (36.5%) of those surveyed were women, larger sample sizes may reveal significant relationships between gender and group affiliation (male = 5.6308, female = 6.2113), gender and eustress (male = 5.9494, female = 5.3695), and gender and self-esteem (male = 5.5965, female = 5.0437). Therefore, potential relationships between gender and these motives should not be dismissed at this stage.

### *6.5. Preference for the BDO or PDC*

The only statistically significant difference between the BDO and PDC fans was that BDO fans were more motivated by player skill than PDC fans. However, this may be due to a third variable effect. Identification and appreciation of player skill were positively correlated and identification was higher amongst BDO fans (mean = 6) than PDC fans (mean = 5.41). Aside from appreciation of player skill, the results showed that motivations for fans expressing a preference for either organisation were similar.

There could be two explanations for this. Firstly, the relatively low sample size and low proportion of the sample that prefer BDO events could mean that differences that do exist were not revealed. Some differences are certainly apparent and a larger sample may show these to be significant (Levin & Fox, 2006).

A second explanation could be that motivational profiles are indeed similar. Although the two organisations administer the sport in different ways, the game remains essentially the same, so it is perhaps unsurprising that this should be so. This finding would support the work of Funk et al. (2008), who showed that fans at golf events administered by different organisations did not report significantly different motives.

What the results would then demonstrate is that while darts fans attending either BDO or PDC events are similarly motivated, the PDC events satisfy darts fans' needs better than BDO events. A vastly higher proportion of those

sampled expressed a preference for PDC events than for BDO events, and while no fans who were surveyed at PDC event would prefer to watch BDO events, 14 (28%) of those attending BDO events would prefer to attend PDC events.

## **7. Conclusions and Recommendations**

The purpose of this research was to identify the factors that motivate darts fans to attend live darts events. Internal reliability problems with a modified version of the SFMS used to collect data were found, but the study reliably managed seven different motivational factors. The relationships between these motives and identification with both the sport of darts and darts players, gender, and preference for either the BDO or PDC were assessed. The implications of these results, limitations of the research, and directions for future research are discussed below:

### *7.1. Implications of the Research*

The current study provides a number of suggestions for marketers working in the field of darts. In particular, it highlights the importance of entertainment and group affiliation to darts fans regardless of gender, preference for a particular governing body, or identification. Therefore, marketing campaigns should communicate the social aspect and entertainment value of live darts events.

The results suggest that darts marketers should base their segmentation strategies upon fans' level of identification with the sport and its professional players. Several authors have previously claimed that identification is an ideal variable on which to base market segmentation decisions (Robinson & Trail, 2005; Sutton et al., 1997; Hunt et al., 1999). It has been demonstrated that highly identified fans tend to attend more events and spend more money when they do so (Daniels & Norman, 2005; Tapp & Clowes, 2000). Therefore,

it is important that darts events not only continue to appeal to highly identified fans, but also that marketers attempt to develop strategies aimed at increasing identification with the sport for weakly or moderately identified fans.

Marketing strategies designed for fans with different levels of identification may be required to communicate different benefits of attending darts events. Marketers should be aware of the relatively high levels of self-esteem and eustress motives of highly identified fans elucidated by this study. Although entertainment and group affiliation were shown to be important to highly identified fans, research has shown that people become less likely to substitute going to watch sporting events for other leisure pursuits as they become more identified with a sport. Therefore, focusing on promoting the eustress and self-esteem benefits may be the most productive means of continuing to attract this audience. Campaigns that focus on rivalries between popular players, the intensity and competitiveness of the tournament, and how prestigious a particular title is may be successful for this segment.

These would be less important to less identified fans and, for them, darts events may be one of a number of leisure options that provide entertainment and the opportunity to spend time with groups of friends (Tapp & Clowes, 2000; Wann 1995). Marketers may have to position darts in terms of these segments' needs, focusing more on providing a high quality leisure experience, as for these fans, darts may be competing with attending a public house, cinema or other sporting events (Beech & Chadwick, 2006).

The results also suggest that segmenting the market by gender would not be a fruitful strategy. Despite the research highlighting some differences in the motivational profiles of men and women, the motives where a significant difference was observed were shown to have relatively little importance to either group. However, the fact that the number of women surveyed was low may mean that rejecting gender as a possible segmentation option would be premature. Further research using larger samples may reveal that gender could be employed as a grouping variable for segmentation strategies.

Perhaps the largest and potentially most far-reaching implication of the research for marketers is that it highlights the popularity of the PDC when compared to the BDO. The results suggest that, rather than attracting fans with different motives, PDC events are simply more attractive to darts fans, as they satisfy their needs and requirements better than BDO events.

This would clearly have worrying implications for the BDO and its event organisers, as it suggests that the PDC and Sky TV's more entertainment focused approach to marketing the game (White, 2007; Waddell, 2007) is more appealing to darts fans than the BDO's more traditional approach (Waddell, 2007). Despite this, many BDO events have been highly successful from a commercial standpoint. For example, every ticket for the 2008 BDO World Championship was sold (Wilson, 2008).

However, the research has highlighted that some fans identify strongly with certain players. The PDC is continuing to pursue an aggressive strategy of

attempting to acquire the best and most high profile BDO players (Wilson, 2008). That it has been successful in doing so on a number of occasions suggests that marketers working for the BDO may struggle to leverage player identification to their long-term advantage. Moreover, by attempting to do so, they may heighten the risk of losing fans to the PDC, due to the trend of popular players 'defecting' to that organisation.

It is difficult to determine how the BDO's management may successfully address these issues without conducting further market research. However, it has been noted that attempts have been made to increase the entertainment value of BDO events by adopting some of the PDC's approaches, notably the use of walk-on music for the players (White, 2007). Given the higher production values available to the PDC (Waddell, 2008) and its offers of prize monies that far outstrip what the BDO is capable of providing, it is questionable whether this isomorphic approach would be enough to attract more fans to the BDO.

## *7.2. Limitations of the Research*

Despite producing useful results, not all of these can yet be generalised and a completely comprehensive view of darts fans' motives was not provided. The reasons for this are that post-hoc analysis of both the data collection tool and the results of the questionnaire highlighted two problems.

Firstly, due to time constraints, the SFMS was not subjected to rigorous testing prior to the data collection process. Previous researchers have used



focus groups to obtain qualitative feedback from sports fans prior to distributing questionnaires (Funk et al., 2003; Funk et al., 2004). This may have revealed the internal reliability issues that were identified prior to its use. The SFMS could then have been adapted to reflect the opinions of the focus group before it was distributed. It may then have been possible to accurately measure aesthetic motives and develop a subscale to measure the importance of player skills. Furthermore, any issues associated with the entertainment subscale would have become apparent before administering the survey.

Researchers wishing to extend the current study of darts fans should note the limitations of the modified SFMS. The study highlighted the importance of player skill, which had not been fully considered prior to conducting the survey, and future studies should include this factor. It has also been demonstrated that the aesthetic subscale was fundamentally flawed. As such, despite the questions relating to aesthetics receiving low scores, no conclusive results could be obtained from analysing this scale. The development of a more specific aesthetic subscale more particular to the sport of darts may be required to accurately measure this factor. Alternatively, marketers and academics may wish to eliminate this from future studies, due to darts not having inherently aesthetic characteristics. Focus groups could be used to clarify this issue.

In addition to problems with the SFMS, the results highlighted a number of sampling issues. Darts tournaments are held throughout the year at many

different locations in the UK. Time constraints necessitated collecting data from only two locations, both at similar times of year. Although this facilitated a comparison between BDO and PDC fans and allowed as representative sample as was possible under the circumstances, ideally fans at a larger number of events at different locations would have been surveyed.

It may have been particularly useful to survey fans at PDC Premier League events. These events differ from those included in the survey, as they include only the top six ranked PDC players, plus two wildcards. There are fifteen rounds; each held at a different location within the UK and lasting for one evening. In contrast to other events, including those used for this study, the tournament's league format means that fans are guaranteed to see certain players and know who will be playing whom in advance of purchasing their tickets.

Therefore, it is possible that fans motivated by self-esteem due to identification with a particular player may be more likely to attend Premier League events, as they will be guaranteed to see that player in action. Furthermore, the guarantee of seeing the world's best players compete with each other, which is not present in open knockout tournaments, may attract more fans motivated by eustress or player skill. Future studies should endeavour to collect data from a number of different locations to determine whether different motivational profiles can be observed at darts tournaments with different formats and at different locations.

The results showed that differences between both BDO and PDC fans and male and female fans were evident for many of the motivation subscales. However, many of these were not statistically significant and no strong conclusions could be drawn where this was the case. Levin & Fox (2006) note that errors caused by rejecting the hypothesis that there is no difference between two subgroups when one exists are most likely to be caused by a low sample size. It has been claimed that at least 50 cases of each subgroup (e.g.  $\geq 50$  males, and  $\geq 50$  females) are required if all differences are to be elucidated at a statistically significant level (de Vaus, 1996). That only 38 of those surveyed were women and 23 of those surveyed expressed a preference for a BDO event suggests that some errors may be present in the results. Therefore, more conclusive evidence of differences in motives due to gender and PDC or BDO preference may have been provided if a larger sample of darts fans were surveyed.

### *7.3. Directions for Future Research*

Whereas this study provides motivational profiles for darts fans attending two events in the UK, future work investigating darts fans should expand the work to research fans at a number of events and in a number of different countries. The PDC is currently attempting to raise the game's global profile; two ranking events are currently staged in the USA, several tournaments are planned for Asia, and events are broadcast live in many European countries (Wilson, 2008). Existing research has highlighted the influence of culture on fan motivation (Kwon & Trail, 2001; Won & Kitamura, 2007) and elucidating differences in motivational profiles of fans in different countries may prove

useful, both to marketers working for darts organisations, and in extending the academic literature concerning relationships between culture and fan motivation.

This research may also provide a useful starting point for researchers wishing to study consumer satisfaction, which is *“associated with numerous positive business outcomes and is recognised as an important field of study”*, van Leeuwen et al. (2005, p99). It has been posited that the results of this research suggest that PDC events satisfy darts fans more than BDO events. Using the motivational profiles revealed by the current work, consumer satisfaction research could be designed to test this theory.

The current work has also highlighted the success of the PDC relative to the BDO. This may provide a fruitful area of study for management theorists. The environment in which sports organisations operate has certainly undergone fundamental changes since the inception of the BDO, and it could be argued that the PDC is better suited to it. Application of population ecology and contingency theories to the sport of darts may shed light on how the BDO’s management can react to the success of the PDC, if at all.

Finally, the current research highlights the importance of studying fan motivation on a sport-by-sport basis and adapting existing tools to reflect the specific nature of the sport in question. Further research into developing methodologies for adapting tools such as the SFMS to reflect the unique characteristics of different sports is required.

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## Appendix A – SFMS Motivation Questions

	Strongly Disagree	1	2	3	4	5	6	7	8	Strongly Agree	
1	One of the main reasons I watch darts is to enjoy a night out with friends										Group Affiliation
2	One of the main reasons I watch darts is to temporarily escape life's problems										Escape
3	One of the main reasons I watch darts is that I get pumped up when I am watching my Eustress favourite player										
4	I like to watch darts because doing so gives me an opportunity to be with my spouse										Family
5	One of the main reasons I watch darts is because of the high levels of skill shown by the Aesthetic players										
6	One of the main reasons I watch darts is so I can bet the events										Economic
7	One of the main reasons I watch darts is because it provides quality entertainment										Entertainment
8	My favourite players' wins feel like my wins and their losses my losses										Self-Esteem
9	Watching darts events allows me to forget about my problems										Escape
10	I enjoy watching darts most when I am with a large group of people										Group Affiliation
11	Making bets is the most enjoyable aspect of being a darts fan										Economic
12	I like the stimulation I get from watching darts										Eustress
13	I enjoy watching darts simply because I have a good time										Entertainment
14	I like to watch darts because doing so gives me an opportunity to be with my family										Family
15	I enjoy my favourite players' wins more than those of other players										Self-Esteem
16	One of the main reasons I watch darts is that many of my friends are darts fans										Group Affiliation
17	One of the main reasons I watch darts is for its aesthetic value										Aesthetic
18	I get a buzz from watching a competitive darts match										Eustress
19	To me, darts is simply a form of recreation										Entertainment
20	I hate to see my favourite players lose										Self-Esteem
21	Darts is only enjoyable if you can bet on the outcome										Economic
22	Watching darts takes me away from life's hassles										Escape
23	I enjoy watching darts because to me it is a form of art										Aesthetic

## Appendix B – Identification Questions

	Not Strongly	1	2	3	4	5	6	7	8	Very Strongly
1	How strongly do you see yourself as a fan of darts?									
2	How strongly do your friends see you as a fan of darts?									
	Not Important	1	2	3	4	5	6	7	8	Very Important
3	How important is it to you that your favourite player wins?									
4	How important is being a darts fan to you?									

## Appendix C – Darts Fans Survey

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### *Darts Fans Survey 2008*

How strongly do you see yourself Strongly as a fan of darts?	1	2	3	4	5	6	7	8
	Not Strongly				Very			
How strongly do your friends see you as a fan of darts? 7 8	1	2	3	4	5	6		
	Not Strongly			Very Strongly				
How important is it to you that your favourite player wins? 7 8	1	2	3	4	5	6		
	Not Important						Very Important	
How important is being a darts fan to you? 7 8	1	2	3	4	5	6		
	Not Important						Very Important	
How regularly do you attend live darts events?	This is my first				[ ]			
	0 – 1 times a year				[ ]			
	2 – 4 times a year				[ ]			
	4 – 6 times a year				[ ]			
	7 or more times a year				[ ]			
Do you subscribe to the following pay-TV channels?								
Sky Sports?	Yes [ ]	No [ ]					Don't Know [ ]	
Setanta?	Yes [ ]	No [ ]					Don't Know [ ]	
Which events would you prefer to attend?	BDO events				[ ]			
	PDC events				[ ]			
	Either				[ ]			
	Don't know				[ ]			

Which events would you prefer to watch BDO events  [ ]  
on television? PDC events  [ ]  
Either  [ ]  
Don't know  [ ]

How strongly does each of the following statements describe the reasons that you watch darts? note: please answer for each statement.

Agree	Strongly Disagree								Strongly
One of the main reasons I watch darts is to enjoy a night out with friends	1	2	3	4	5	6	7	8	
One of the main reasons I watch darts is to temporarily escape life's problems	1	2	3	4	5	6	7	8	
One of the main reasons I watch darts is that I get 'pumped up' when I am watching my favourite player	1	2	3	4	5	6	7	8	
I like to watch darts because doing so gives me an opportunity to be with my spouse	1	2	3	4	5	6	7	8	
One of the main reasons I watch darts is because of the high levels of skill shown by the players	1	2	3	4	5	6	7	8	
One of the main reasons I watch darts is so I can bet on the events	1	2	3	4	5	6	7	8	
One of the main reasons I watch darts is because it provides quality entertainment	1	2	3	4	5	6	7	8	
My favourite players' wins feel like my wins and their losses my losses	1	2	3	4	5	6	7	8	
Watching darts events allows me to forget about my problems	1	2	3	4	5	6	7	8	
I enjoy watching darts most when I am with a large group of people	1	2	3	4	5	6	7	8	
Making bets is the most enjoyable aspect of being a darts fan	1	2	3	4	5	6	7	8	



26 – 35	[ ]
36 – 45	[ ]
46 – 55	[ ]
56 – 65	[ ]
Over 65	[ ]

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