



# **The Role of Psychological Factors in Recreational Sport Participation**

**A research report produced for sports coach UK by**

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## 1 Literature Review

It has been well documented (eg Bioché & Sarrazin, 2007; Khan et al, 2012; Koivula, 1999) that participation in regular physical activity such as recreational sport has positive effects on both physical (eg appearance, slimness, conditioned body) and psychological health and well-being (eg self-esteem, anxiety, depression, vitality, energy). Physical activity includes all forms of activity and can range from “everyday walking or cycling to get from A to B, active play or playing active games as well as organised and competitive sport” (Department of Health, 2011, p. 9).

The Department of Health stated that lack of physical inactivity is the fourth leading risk factor for global mortality, following high blood pressure, tobacco use and high blood glucose. The recommendation of 30 minutes at least five days a week (for adults) helps prevent numerous physical and health problems. Physical activity is therefore not only encouraged but is recommended as part of a healthy lifestyle (Khan et al, 2012).

In 2013, Sport England commissioned and conducted a large scale research that has generated a mass of information about who plays sport, the benefits of sport and encouraging take up (<http://www.sportengland.org/research/>). It is noteworthy that nearly 55% of the sample aged 16-25 participated in sport once a week for 30 minutes or more. Moreover, 31% of adults aged 26 years+ participated once a week for 30 minutes or more. More males (40%) than females (30%) aged 16+ participated in moderate intensity level sport at least once a week.

These are encouraging results but may also highlight that there’s a long way to go. Recent research has revealed that young people who participate in sport *every day* are twice as likely to have high levels of happiness as those who participate in sport on two or fewer days in a week (McFall, 2012). Overall, more involvement in sport can evidently have positive benefits for both young and old.

Despite the established benefits of physical activity (regardless of age and gender) underlined by scientific research and government recommendations, the role of the psychological factors in physical activity specifically related to recreational sport participation remains limited. An understanding of these factors could provide important information on what causes people to initiate and maintain participation in recreational sports. Understanding these reasons could help practitioners engage more people in recreational sports for longer and help participants enjoy more the benefits of their participation.

Whilst there is a lack of research on the psychological factors associated with recreational sport participation, there is a plethora of research exploring the psychological factors associated with elite sport participation. The findings of this research have highlighted that such factors as confidence, concentration, coping, motivation, commitment and support are key for participation at the highest level of sport (eg Gould, Dieffenbach, & Moffett, 2002a).

These psychological factors, whilst important for participation in elite sport, may not accurately reflect the psychological factors associated with participation in recreational sport. For the purpose of this study, we define recreational participation as engagement in regular physical activity that involves any organised sport with the focus on fun, learning, and others factors, including competition. What differentiates elite from recreational sport is that while competition and everything that relates to it (eg sponsorships, scholarships, medals, trophies, travelling) is a requirement of elite sport, it is not for recreational sport participation. Thus, this research aims to examine the specific psychological factors associated with recreational sport participation.

The literature review is presented in two parts. The first provides a brief overview of the literature concerning the psychological factors prevalent in elite sport. The second provides an overview of literature concerning the psychological factors associated with recreational sport. These are followed by a summary with concluding remarks.

### ***Psychological Factors in Elite Sport***

A series of studies conducted with Olympic athletes and coaches (Greenleaf, Gould, & Dieffenbach, 2001; Gould et al, 2002a; Gould, Greenleaf, Guinan & Chung, 2002b) revealed a range of psychological factors associated with elite sport and successful performance. For example, Greenleaf and colleagues (2001) interviewed sport performers who participated in Olympic Games; their findings revealed top level performance was linked to psycho-social factors. Psychological factors included athlete self-confidence, focus on fun, and positive attitude, whereas social factors included social support, coach inter-personal trust and team unity. Whilst these were viewed as positive factors, negative factors to performance were also uncovered including coach conflict, negative team atmosphere, poor interaction with teammates, lack of support, and money concerns.

In the follow-up study Gould et al (2002a) interviewed 10 Olympic level athletes, as well as their coaches and significant others (eg parent, guardian). Psychological inventories were also administered in order to understand further the psychological characteristics and development of elite athletes. The findings revealed that Olympic level athletes were characterised by such psychological factors as: coping with stress and controlling anxiety, setting goals and achieving goals. Moreover these athletes demonstrated high self-confidence and mental toughness, as well as high levels of hope, optimism, and adaptive perfectionism.

Gould also highlighted that psychological factors such as those listed earlier were developed in an environment within which family members, coaches and sport-related personnel as well as other individuals played an important part. The social environment is capable of promoting the development of these factors in both a direct or deliberate way through teaching/coaching and indirect or unintentional way through modelling. These findings are important because they underline the interaction between intra-personal (eg self-confidence, motivation) and inter-personal or environmental/social (eg leadership, relationship) factors for participation at the highest level of sport.

Another study by Gould et al (2002b) conducted research on coaches' perceptions of successful participation in elite sport. Surveys completed by coaches revealed that team cohesion, athlete self-confidence and social support were amongst the most important factors. Both self-confidence and social support have been found in numerous studies to be key psychological factors to top-level performance by both coaches and athletes.

The factors affecting self-confidence have also been explored; specifically the role of self-esteem and perfectionism (eg Koivula, Hassmén & Fallby, 2002). Within this study self-esteem was viewed within two dimensions, *basic* and *earned* self-esteem. Basic self-esteem referred to a fundamental love, respect, and self-acceptance of oneself and is fairly static in nature. By contrast, earned self-esteem concerned the need to be appreciated by others, to feel competent and in control, and is more temporary and sensitive to situational factors (Koivula et al, 2002).

Similarly, perfectionism was divided into positive and negative dimensions. The negative dimension of perfectionism included concern over mistakes, doubts about actions, and fear of failure. The positive dimension included high personal standards, positive achievement strivings, followed by feelings of satisfaction and enhanced self-esteem (see Frost, Marten, Lahart & Rosenblate, 1990). The findings showed that negative perfectionism (eg concern over mistakes, fear of failure) was associated with increased

competitive anxiety and reduced self-confidence in elite athletes. In terms of self-esteem, high levels of basic self-esteem resulted in more positive perfectionism and ultimately increased self-confidence but also lowered anxiety. By contrast, athletes whose self-esteem (earned) was entirely based upon feelings of competence and control experienced negative perfectionism, resulting in low self-confidence and high anxiety. Therefore, self-esteem alongside perfectionism appeared to be important factors in the elite athletes' confidence.

Further to the research conducted by Koivula et al, Woodman and Hardy (2003) conducted a meta-analysis examining the impact of cognitive anxiety and self-confidence on sport performance. Findings revealed that cognitive anxiety and self-confidence are distinct constructs and should not be viewed as opposite ends of the same continuum. In other words, an athlete displaying high self-confidence can also display high cognitive anxiety. The analysis also indicated that the effect of self-confidence on performance was greater than that of cognitive anxiety. Therefore, athletes who experience high levels of both factors will still perform to a high level as their high self-confidence can counteract or buffer the negative effect of cognitive anxiety. Woodman and Hardy also reported that the standard of competition significantly moderated the self-confidence to performance effect. Thus, the effect was stronger in high standard competition.

Finally, Mallett and Hanrahan (2004) examined the psychological characteristics of elite athletes in terms of their motivational processes. Interviews with elite athletes revealed that they were defined by self-determined forms of motivation. In other words, elite athletes viewed their sport as central to their lives and took part for the sense of achievement it gave them through goal accomplishment. This resulted in athletes having high perceptions of competence in their sport which further increased their level of self-determined motivation. Elite athletes were also reported to have self-belief in their abilities, a factor that can be linked to self-confidence. Elite athletes are therefore defined through their self-determined motivation to participate in their sport. Motivation is generally a very well researched area within competitive/elite sport within sport psychology; the work conducted by Joan Duda and colleagues on goal orientation and motivational climates is seminal but beyond the scope of this review.

While these studies give a flavour of the work conducted within elite sport, they are not exhaustive. Nonetheless, they reinforce the importance of such psychological factors as confidence, anxiety, coping, motivation, team cohesion, social support and quality coach leadership, coach-athlete relationships in elite sport participation and successful performance.

### ***Psychological and Other Related Factors in Recreational Sport***

This section provides an overview of the available literature on recreational sport participation. The studies reviewed cover nearly three decades from 1981 to 2010 and will be discussed in chronological order in an attempt to highlight the progress and identify key factors associated with participation in recreational sport.

Kleiber and Hemmer (1981) examined the role of locus of control in recreational sport participation between males and females. According to the notion of locus of control, there are two dimensions: *external* and *internal* locus of control. Individuals with an external locus of control believe that their lives are controlled by outside forces, such as chance and other people. Individuals with an internal locus of control believe that they are in control of their lives and are more resistant to outside forces.

The individuals within this study were categorised into three recreational participation levels: **none** ( $n = 44$ ), **for fun only** ( $n = 40$ ), and **organised team** ( $n = 36$ ). When comparing males to females, more males were categorised in the organised team category (23 cf 13) whilst more females were involved in sport for fun only category (25 cf 15). The study showed that females involved in organised teams were more internal in

their locus of control than females who participated for fun. Females participating in organised teams also had a more internal locus of control than males participating in organised teams, but the significance was marginal. Finally, the males in the fun only category had the most internal locus of control of all the categories across genders. While Kleiber and Hemmer suggested that sport is generally a male dominated arena, it may require a strong internal locus of control for females to commit to organised sport teams. It is also possible that females with internal locus of control are more likely to be attracted by competitive recreational sport because they may be more confident and/or have higher levels of self-esteem.

Motivation has also been the focus of research for recreational sport participation (Fortier, Vallerand, Brière & Provencher, 1995). This study explored different facets of motivation including *intrinsic*, *extrinsic*, and *amotivation* within elite and recreational sports. Extrinsic motivation is represented in individuals who participate in sport for the external rewards or to avoid negative consequences, not for the fun of participating or an internal love for the sport. The concept of amotivation refers to individuals who are neither intrinsically or extrinsically motivated towards participation. Individuals in this state of motivation perceive no control over their actions and question their very involvement in the activity.

Within this research, intrinsic motivation was divided into three types: *to know*, *to accomplish things*, and *to experience stimulation*. Intrinsic motivation to know relates to the pleasure and satisfaction experienced when learning, exploring, or trying to understand a new skill. Intrinsic motivation to accomplish things can be defined as engaging in an activity for the pleasure and satisfaction experienced when trying to accomplish a task. Finally, intrinsic motivation to experience stimulation occurs when someone engages in an activity to experience the stimulating sensations derived from the activity, such as fun and excitement. Results showed that the recreational sport participants demonstrated *intrinsic motivation to experience stimulation* and *to accomplish things*. In addition, females were more intrinsically motivated to *accomplish things* than their male counterparts whilst also demonstrating less external motivation and amotivation.

Research conducted by Stein, Kimiecik, Daniels and Jackson (1995) aimed to examine the psychological antecedents of flow in recreational sport, specifically, the psychological factors of goals, competence, and confidence. The concept of *flow* is a psychological state that typically occurs in individuals who perceive a balance between the challenges associated with a situation and their ability to meet those challenges (Csikszentmihalyi, 1990). An individual can also experience non-flow which can be categorised into three contexts; anxiety, boredom and apathy. The anxiety non-flow state is experienced when the challenge of an activity is greater than the individual's average and their ability to cope is less than average. Boredom is experienced when the challenge is less than the individual's average and their abilities are greater. Apathy occurs when both the challenge and the individual's ability to cope are below average.

These flow states were examined within two recreational environments: a competitive and a learning environment. The competitive environment in this study was either a tennis tournament or a competitive round of golf, whereas the learning environment was a basketball activity session. Perceptions of flow state and quality of the experience were assessed in each environment. In Study 1, an individual's quality of experience following the tennis tournament was measured with two items assessing enjoyment, "*How enjoyable was the match?*" and satisfaction "*How satisfied are you with your performance in today's match?*" Responses were measured on a nine-point response scale. In Study 2, the basketball learning environment was examined and three additional factors of concentration, control, and success were included within the assessment. Finally, in Study 3, the quality of experience in the golf tournament was assessed via experiences of enjoyment, satisfaction, concentration and control.

The findings showed that the flow and non-flow state of boredom resulted in a better perceived quality of experience within the competitive environment. The authors suggested these results were due to the nature of the competitive environment. Within this environment outperforming, excelling, and winning are given more importance than within a learning environment which focuses on developing skills. Having higher levels of skill than the task requires (ie boredom non-flow) is considered helpful in competition and so the quality of the experience does not suffer. By contrast, only the flow state in which the challenge and skills required were balanced with the individual's average resulted in better quality experience within the learning environment.

Therefore, when learning new activities individuals gain a better quality of experience when the challenge is greater than they normally face and the skills required are above what they have. This leads to individuals gaining a sense of accomplishment when they learn the skills needed to overcome the challenge. Whilst the boredom state may result in achieving good performance in a learning environment, individuals will not feel that they are learning anything new and therefore overall satisfaction will be low. The findings also showed that the psychological factors of competence, goals, and confidence were not identified as antecedents of flow experience in recreational sport. Stein suggested this may have been a result of the psychological antecedents measured being linked more to performance - flow is a more subjective state and not an objective occurrence.

In a study to examine the relationship between goal orientations, beliefs about the causes of success, and trait anxiety among high school, intercollegiate, and recreational sport participants, White and Zellner (1996) observed that the recreational male participants equated effort (working hard at the task) as the way to succeed in and enjoy their sport. Recreational sport participants reported using a task based goal orientation in which motivation to improve and train hard were important, as opposed to an ego orientation in which winning and proving oneself to be superior was more important. By contrast, high school and intercollegiate competitive or elite sport participants within this study were found to have higher levels of ego orientation and thus outperforming others and winning was a primary motivation.

An earlier study by Duda (1988) revealed similar findings. Recreational sport participants who placed a high emphasis on task (eg hard work with an emphasis on improving one's own skill level) were more likely to have participated in their sport longer and practised their sport more in their free time. Duda also found that goal orientations were significantly varied as a function of participant gender and previous competitive sport involvement. Females were less oriented than males to ego goals, where outperforming others and winning are focal elements of participation. This was especially true among both males and females who had previously engaged in competitive sports. In line with achievement goal orientation (Nicholls, 1989), it was concluded that a task orientation would foster intrinsic motivation and in turn would lead to long-term participation in recreational sport.

Alexandris and Carroll (1997) examined the constraints associated with recreational sport participation levels in Greece. Such constraints have been defined as "the factors that inhibit or prohibit participation and enjoyment in leisure" (Jackson, 1993). This study identified time and availability of facilities as the most important constraints. In addition, individuals who did not participate in recreational sport were significantly more constrained than those who did, especially in terms of perceived health and fitness, competence, and knowledge levels. The authors suggested that help from significant others, such as family and friends, and appropriate introductory programmes may overcome perceived barriers to participation. Findings indicated that perceptions of perceived constraints reduced with increased participation. It was thus concluded that if initial constraints can be overcome and individuals can begin participating in recreational sports, they would view fewer constraints, encouraging continued participation.

Koivula (1999) investigated motives for sport participation between males and females. Findings from this study showed that regardless of gender, physical health, fun, and enjoyment were rated as the most significant motives for participating in sport. In terms of gender differences, males were found to rate competition as a more important motive for recreational participation than females, whilst females rated appearance as a more important motive than males. The findings from this study suggest that while males and females have different reasons for participation in recreational sport, physical health, fun, and enjoyment are universally important.

In a study by Hubbard and Mannell (2001), constraints in recreational activities were examined in terms of the negotiation processes individuals engage in. It was speculated that negotiation strategies are used by individuals to overcome perceived constraints to recreational participation, among them time management (eg cutting short sessions, getting up earlier to ensure time to participate) and financial negotiations (eg budgeting, improvising with equipment). According to the constraint-effects-mitigation model, constraints have a negative effect on participation, whilst negotiation has a positive effect. The findings of this study showed constraints positively influenced the use of negotiation. Increased motivation in terms of health and enjoyment was found to increase negotiation efforts, but was not directly linked to participation. Overall the findings showed that whilst constraints reduce participation, they also trigger negotiation strategies which counteract the negative effect of constraints and can increase participation in recreational activities. Also, motivation to participate for health and enjoyment increased the effort put into negotiating against constraints and was shown to help individuals start participating in recreational activities and to maintain their level of participation.

Research has also been carried out to examine whether participation in recreational physical activity differs across socio-economic groups (Burton, Turrell, & Oldenburg, 2003). The groups examined in this study were chosen based upon socioeconomic position (SEP). They were organised into a high, middle and low SEP groups. The participants in the high SEP group came from a private consultancy firm, the middle SEP group from the local city council, and the low SEP group from the offices of the Salvation Army. The results of this study showed the variety of influence socio-economic groups have on recreational sport participation.

Common influences across all groups included previous opportunities, physical health, social assistance, safety and physical and health benefits, and the barriers of self-consciousness, low skill and weather/time of year. Influences unique to the high SEP group included social benefits, achieving a balanced lifestyle, and the barrier of an unpredictable lifestyle. In the middle SEP group, relevant influences included efficacy, perceived need, activity demands, affiliations, emotional benefits, and the barrier of possible competing demands between recreational participation and other life demands. Finally, influences most commonly associated with the low SEP group included poor health and the barriers of inconvenient access and low personal functioning. The findings suggest that individuals from different socio-economic backgrounds may perceive different reasons and barriers to participating in recreational sport activities.

In another study concerning the role of motivation, Kerr, Au and Lindner (2004) examined the association between motivation and level of risk in male and female recreational sport participants. The aims of the study were to examine whether motivation differed for low- (eg aerobics, badminton, tennis), mid- (eg athletics, fencing, volleyball), and high-risk (eg handball, judo, rugby) sports, judged in terms of injury risk between males and females. The findings showed that males in high-risk sports reported their motivation to be based around fun and enjoyment whilst motivation to partake in low-risk sports was based around health and fitness benefits.

By contrast no significant differences in motivations to participate were found across risk groups for females. However, females taking part in high-risk sports did state that

feeling in control and mastering risky situations was more important to them than it was to those involved with medium and low-risk sports. Moreover, findings showed that females rated developing friendships as being a significant reason for engaging in sport when compared to males. Based on their findings, Kerr et al proposed that to encourage participation in recreational sports, a wide range of activities with a range of risk levels should be made available. In order to appeal particularly to females, sports or programmes should be made available where females can develop relationships, including group/team activities with medium to high risk levels.

Further research into the role of self-determined motivation in sport participation was conducted by Boiché and Sarrazin (2007). They examined individuals' motivation towards three life domains (sport, school and friendship) and the potential conflict between these. Overall the findings showed that self-determined motivation towards sport resulted in increased participation, and that conflict between the school and sport domains subsequently reduced motivation to participate in sport. The conflict between the sport and friendship domains did not reduce sport participation. These findings show further support for the important role that motivation has in sport participation whilst demonstrating that conflict between school and sport could result in reduced participation.

The social attitudes of Turkish students to recreational participation were explored through research by Goral (2010). This research aimed to determine the factors that are effective in encouraging students to try a sport and increase participation numbers. Important factors that were found to influence participation in sport included family support and the media. Individuals were more likely to participate in a sport if they received support from their families and if the sport received coverage in both the print and visual media. This aspect of media influence on participation has not been identified in any of the previous studies mentioned in this review. Findings also showed that families provided more support to males than females and that wealthier families provided more support than the less well-off families. This has conceptual links to the socioeconomic findings reported by Burton et al (2003).

Beaton, Funk, Ridinger and Jordan (2011) conducted research in which sport involvement using the Psychological Continuum Model (PCM) framework was employed. The PCM was originally developed by Funk and James (2001) in the context of sport participation by examining the various stages associated with supporting a sports team. The PCM consists of four stages of psychological connection to a sport: *awareness*, *attraction*, *attachment* and *allegiance*.

The awareness stage is characterised by simple knowledge of participation opportunities, whilst allegiance is characterised by positively biased cognitions towards the sport, durability and attitudinal and behavioural loyalty. The progression through the various stages of the PCM is not dependent on time spent in each stage; an individual can progress or regress through the model according to circumstances. When applying the PCM to recreational marathon runners, the findings showed that runners whose behaviour suggested stronger psychological connections to the sport engaged more in terms of frequency, depth and breadth of sport-related behaviours. It was thus recommended that to encourage long-term participation in recreational sport organisations, coaches should aim to develop individuals' connection to the sport from the initial awareness and attraction stages to the higher attachment and allegiance stages.

Finally, Lera-López and Rapún-Gárate (2011) found that participation in recreational sport was constrained by economic, sociological and psychological variables such as gender, age, time available to participate and motivational factors. Specifically, it was reported that women showed higher sports participation frequency than men and that as age increased so did participation frequency. Furthermore, motivational factors such as fun, slimness, fitness and competition have shown to increase participation. The authors

provided practical suggestions for increasing participation including marketing sports in terms of the fun and health and fitness aspects as these were shown to be the most important motivators for sport participation frequency.

### ***Summary and Concluding Remarks***

The review has highlighted a range of important factors associated with recreational sport participation ranging from intra-personal (eg confidence, motivation), inter-personal (eg coach support and others), and environmental (eg facilities, media, types of recreational sport programmes). It is evident that a range of constraints to recreational sport participation exist including time and money as well as availability of facilities or indeed appropriate recreational sport opportunities.

While the elite sport participation research highlights that confidence, motivation, self-esteem, perfectionism and social support are important factors, it would appear that similar factors are linked to recreational sport participation. However, these factors appear to differ in the role and significance they play depending on the context (elite versus recreational) they are experienced. For example, findings suggest that the level of recreational sport played may moderate the importance of self-confidence and that the type of recreational sport activities may be linked to different motives people have for participation. For example, individuals participating in competitive recreational sport leagues may report self-confidence as being more important to participation than individuals participating in recreational sport for fun or fitness. Equally, recreational sport participants engaged in high risk sports may be more motivated by fun and excitement while participants in low risk sports may be more motivated by health and fitness.

It would appear that an understanding of what motivates people to participate in recreational sport could be an important psychological factor to consider, especially when considering ways of increasing and maintaining participation in recreational sports. Motivation not only promotes participation in recreational sport because of the internal benefits experienced but it can help overcome perceived participation constraints.

Other related factors include locus of control, flow states and goal orientations. In terms of flow states, the findings suggest that creating environments in which individuals can experience optimal flow states could improve prolonged participation in recreational sports. Specifically, a balance between the level of challenge and the skill needed to achieve is required so that individuals do not enter the anxiety or apathy states which may result in withdrawal from the activity. Motivational orientations, perceived constraints and socio-economic information may be key elements to consider. Finally, the application of a psychological framework such as the PCM could promote a better understanding of the stages of recreational participation that people are in and the psychological factors associated within each stage.

Whilst research into the psychological factors involved in recreational sport participation is comparatively limited, this review has identified a number of factors that appear to have an important influence in recreational sport. This research, however, has only examined a very limited range of psychological factors. This is in stark contrast to the elite sport participation literature in which numerous studies have been systematically conducted to examine the breadth and depth of psychological factors within the elite sport context. A comprehensive examination into the psychological factors in recreational sport participation that incorporates intra-personal, inter-personal and environmental dimensions would provide extensive empirical and practical information. From a practical viewpoint, better understanding of the psychological factors involved in recreational sport would help increase and maintain high levels of participation leading to a healthier and happier nation.

## **2 Method of Study and Results**

### ***Specific Aims of Study***

The aims of the current project were to gain an understanding of the factors associated with recreational sport participation, specifically concerning the psychological factors of participation including the role of the coach and the provision of quality coaching. To gain an understanding of these factors, we conducted semi-structured interviews with recreational participants from a range of sports. In addition, we conducted interviews with a small sample of coaches to gain their perspective of recreational participation.

### ***Method***

A total of 17 recreational participants representing a range of sports (eg rugby, football, tennis, athletics, basketball, American football, volleyball) participated in the research. Moreover, three coaches representing rugby and athletics participated. The recreational participant sample was 10 males (58%) and 7 females (42%) with an age range of 18-63 years ( $M = 26.8$  years). The recreational participants in the sample were predominately of White British ethnicity (88%). The coaching sample was all White British male coaches with an age range of 27-58 years ( $M = 41.3$  years).

### ***Procedure***

Following ethical approval from the Loughborough University ethical committee, local sports clubs were contacted regarding participation in the study. Following a response from interested clubs, the research associate attended a training session in which the aims of the research project were explained to the recreational participants alongside the requirements for participation. The requirements in this study for recreational participants included: (a) participants attended sessions led by a coach, (b) they participated at least twice per week, and (c) they did participated for fun, enjoyment, health, slimness, and competition (but not to become an elite athlete). Similarly, the requirements for participation for coaches included: (a) they coached recreational training sessions at least twice per week, and (b) coaching focussed on providing fun, challenge, enjoyment, opportunities to gain health benefits (the aim was not elite performance).

Individuals who showed an interest in the research were then given the information sheet and an interview scheduled. The interviews were conducted either in person on the Loughborough University campus or the participants' place of work, or were conducted over the phone. All interviews were recorded to aid transcription and analysis; all participants were informed of this and provided their informed consent. Semi-structured interviews were conducted with each participant lasting between 25 and 50 minutes. A list of open-ended questions guided by previous research and the specific aims of the research guided the interview. The questions within the interview schedule were intended to elicit responses concerning intra-personal aspects (eg goals, motivation, confidence), inter-personal aspects (eg coach, coaching, social support) and environmental aspects (eg facilities, equipment) of recreational participation. Each interview concluded with broad questions asking the participants for their general suggestions for improving and maintaining recreational participation. The interviews conducted with the coaches used a modified schedule to elicit responses concerning primarily factors involving the coaching environment created, exploring the notions of enjoyment, motivation, expectations and goals, as well as the importance of hard work and improvement. The semi-structured format was designed to ensure a consistent framework across all interviews, whilst providing opportunities to explore participant responses and experience when/if needed. Following the interviews all recordings were transcribed by the research associate.

### *Data analysis*

All the interview transcripts were inserted into QSR NVivo 10 to enable analysis to be carried out. The research associate then conducted inductive-deductive content analysis on the transcriptions. Each transcript was examined line-by-line and information identified as representing one of the main research categories (eg coach characteristics, motivations, coaching environment) was coded accordingly, resulting in 137 pages of single-spaced text. The lead researcher discussed the coded information with the research associate; in the majority of instances both investigators agreed with the coded system. The main change was merging a number of categories that seemed to overlap in content. This process ensured trustworthiness of the data and of the final coded system. The coded system contained the three higher order themes: intra-personal, inter-personal, and environmental factors. Within these broad categories data were categorised into second order themes and into three higher order themes.

### **Results and Discussion**

The participant and coach interviews revealed some interesting insights into the factors that influence recreational sport participation, particularly in terms of the coach's role. Within the discussion of the findings all names of participants have been changed to ensure anonymity. A total of 862 meaning units were identified and using deduction content analysis these were placed into 26 categories and three general dimensions. The discussion that follows is organised along the three general categories, namely, (1) inter-personal factors; (2) intra-personal factors, and (3) environmental factors.

#### *Inter-personal factors*

Inter-personal factors influencing recreational sport participation were identified through two major themes; coach factors and support from others. In terms of coach factors participants reported several important factors: (1) coach characteristics (93 references from 20 participants); (2) coach environment (78 references from 20 participants); (3) coach knowledge/experience (28 references from 16 participants); (4) coach knowing the reason for participation (36 references from 20 participants); (5) coach's influence on participation (20 references from 13 participants), and (6) the importance of quality coaching (33 references from 17 participants).

In terms of coaching characteristics, participants mentioned the characteristics that their current coach demonstrate but also discussed the characteristics they expected from recreational sport coaches. For example, Participant 9 said, "He is quite understanding; if we come with issues or whatever he will listen; the important thing is he listens to us as well". Similarly, Participant 7 said when asked about their coach "She's really enthusiastic about it - that rubs off on the girls". These quotes highlight that being understanding and listening to the recreational participants are important coach characteristics. Recreational sport participants seemed to suggest that they would prefer a coach who is approachable, proximal and friendly to them as well as trustworthy and respectful of them. Like sport participants at the elite level of performance (eg Greenleaf et al, 2001; Gould et al, 2002a), responses from the recreational participants suggest that they appreciate coaches with an inter-personal character than an impersonal one. For example Participant 8 said:

You kind of trust him that he knows what it takes to get to a high level. Whatever training we do it will be painful some of his training sessions, but you know at the end of the day that later on it's going to benefit you, but I think an element of it is trust as well, you have to trust your coach.

Similarly:

Try and be approachable too, so people can come and ask questions and not be afraid of like having their head bitten off or something. It's just being a nice person really, but at the same time you have to be strict at times so that sessions get done and it's not just people messing around and having fun without doing the work. (Participant 15)

Coaches' responses were consistent with the idea that recreational participants expect coaches with good relationship and inter-personal skills. For example, Coach 3 said,

I think they want someone they can perhaps get along with on a social level and not just someone where they turn up and they just follow instructions and there's no real relationship there.

In terms of the characteristics expected of recreational coaches, participants mentioned factors such as being fun, organised, energetic and enthusiastic. For example:

They should be fun and make sessions fun, but also make sure they have things organised so that people actually gain something from sessions and don't just do the same stuff again and again. (Participant 16)

These characteristics identified by the recreational participants were supported in the responses reported by the coaches interviewed. When asked about the characteristics they thought participants expected Coach 1 said, "I think they want someone who will keep it fun and enjoyable whilst also providing them with new skills in a sport that they must enjoy doing or they wouldn't be doing it". This finding is consistent with much of the literature on recreational sports and elite level sports. On one hand, Greenleaf and colleagues (2001) reported on the importance on placing emphasis on fun and positive attitude in elite level sport. On the other hand, Koivula's (1999) research highlighted the importance of fun and enjoyment as significant reasons for recreational sport participation. Overall, it would appear that with the number of constraints individuals have to negotiate (Hubbard & Manell, 2001), fun, enjoyment and positive attitude may prove strong pulls and drives for negotiating obstacles against sport participation (eg time constraints) and committing long-term to it. Overall, there appears to be an agreement regarding the characteristics that both sport participants and coaches believe are important for coaches to display within the realm of recreational sport.

The coaching environment was an important factor mentioned by all of the recreational sport participants interviewed,

It's a really good environment and atmosphere at training. It's always fun even when we're working hard in say pre-season and it's tough fitness work. He's always making sure the girls have fun too and he tries to make every session enjoyable. (Participant 15)

They create a relaxed environment when it's OK to be relaxed and then more of an intense environment when we need to be intense. (Participant 11)

He makes everyone feel really relaxed and there's nothing tense about the sessions. (Participant 2)

These quotes illustrate how the participants viewed an effective coaching environment. It is interesting to note their agreement that the environment requires coaches to be on one hand relaxed, comfortable, and lenient and on the other hand strenuous, challenging, and demanding. The coaches had similar views regarding the environment they attempted to create during sessions:

I think I create, or at least I try to create, an enjoyable atmosphere. I talk to the group as I would to anybody else really so we talk about other things to do with sport or whatever else during sessions. Everyone can have a laugh but we also

get the sessions done; if they need telling to get on with things, I will give them that kick up the backside. (Coach 2)

The coaches also talked about creating an "open" environment, for example:

Being open with them, talking about what we want them to do and asking them questions regarding drills and tactics so that they can understand it more. I don't believe in just telling them what to do all the time, because I don't think they learn that way. (Coach 3)

Collectively, this finding reflects research conducted in elite performance level where athletes expect good training but also expect support (Antonini & Seiler, 2006; Chelladurai & Carron, 1983; Jowett & Cockerill, 2003; Jowett & Yang, 2013). Creating an environment where these diverse expectations are bridged is an important skill for coaches to have, even at the recreational level. The research reinforces the importance of autonomy of athletes and the coach's ability or skill to use autonomy supportive behaviours as opposed to controlling coaching behaviours (Bartholomew et al., 2011).

In terms of coaching experience and knowledge, the participants commented that they believed their coach to have a good knowledge base. Most had qualifications and had been coaching for several years. A good example of the importance of this comes from Participant 7:

Our coach has fantastic knowledge - he was a professional footballer himself which I think automatically gains him the respects of the girls because we know he's played at the top level so he's been coached to a really high standard

This quote also shows how having coaches who have played the sport at a respectable level can have a positive impact on how the participants view them. It is possible, however, that while first impressions matter, it is the quality of interactions over a period of time that ensure positive impressions of participants are maintained.

Another important element was the coaches' awareness of the participants' reasons for taking part in sport. Participants felt that coaches who were knowledgeable and aware of their specific reasons for participation were better equipped to help them improve and enjoy their sport. Participant 11 reported:

I think they understood why everyone wanted to be there - we all wanted to play for [university name] and to do like our uni proud. I think that was a lot easier because everyone was there for the same reason. Everyone was there for friendship because we were quite similar people but because everyone was there for the uni, it was a lot easier for them to try and pitch their coaching at us.

Similarly, Participant 3 explained:

They are aware of how seriously we take it. I think they respect that and they'll make those guys who are training week in week out captain or let them run parts of sessions and ask their opinion first to try bring other guys involved.

This shows that not only did the coaches know the reasons for peoples' participation but they would also use that knowledge to coach them effectively and successfully. This is further highlighted by Coach 1 who said:

I do know why they participate - I take the time to talk to them when they start out and also at the start of the season to establish why they are there. If they end up in my training group, they are obviously quite serious about it. It does help because you can push them a bit harder than others and it means I can set training sessions out accordingly.

Therefore, knowing the reasons of individuals' recreational participation appears to be an important factor and one that both participants and coaches acknowledge. This finding is important and possibly unique in both the literature of elite sport and the literature of recreational sport that we searched and know of, as it underlines the significance of knowing the participants' intentions, motivations, goals, and aspirations.

Recreational sport participation literature highlights that sport participants have very diverse reason for participation ranging from social benefits, health benefits, slimness, fitness, fun and competition (Burton et al, 2003; Kovula, 1999; Lera-Lopez & Kaprim-Garate, 2011). Thus the process of knowing the other person and their intentions may serve not only to tailor training but to develop a close bond, a connection between a coach and each participant in a group or team. This bond has been found to be extremely important for performance but also for sport participants' wellbeing (eg Jowett & Cockerill, 2003).

A further aspect related to the coach and coaching was concerned with coaches' positive influence on individuals' participation. Participant 16 said:

Because he was one of the guys and easy to get on with, it made it easy to participate. It was never a chore - you wanted to go training because you knew it'd be fun but also hard work, so I guess he helped with that.

Similarly Participant 6 said:

I'd say the coach influences my participation positively. I like the way that they coach. I feel that there is a good dynamic; I'm definitely learning and that makes me want to come back for more and the fitness as well that's made me want to come back for more cause I feel that that's improving my game.

These quotes highlight that coaches have a unique power to influence positively their participants in different ways: "making them feel good" and "making them better athletes/performers". Finally, the importance of quality coaching was discussed. When asked whether they thought quality coaching was important at the recreational level, all participants responded positively. For example:

Even at local sport level, I think the quality of coaching is crucial; I've been at clubs before where perhaps the coaches haven't been fantastic and straight away you can see how that affects the players. (Participant 7)

How good your coaches are makes a massive difference. You can have the best players in the world but if you're playing to a game plan that doesn't suit the attributes of the team, you're not going to get anywhere. (Participant 3)

Quality coaching is needed at the recreational level as much as at any other level of sport to ensure that participants continue to take part. When asked the same question, the coaches' responses were in line with those of the recreational participants:

I think quality coaching is very important. If you don't have good quality coaching, people will not improve and the sport will suffer from a lack of talented athletes. (Coach 1)

You need quality coaching in place to keep people interested and enjoying the sport they love playing. (Coach 3)

Although participants are expected to pay to take part, no one in the interviews explained or described their role or position as a customer. They are, however, consumers of sports coaching and have high expectations of it, as they would have from other service providers. Service quality is an achievement in customer service. In sports coaching, service quality is reflected in every encounter between participant and coach.

Coaching quality is reflected in the coaching (training and instruction) but in every aspect discussed earlier (eg fun, enjoyment, approachability, respect and trust); these will be discussed further later in this report.

Another inter-personal factor discussed by the participants was the support they receive from other people - friends, family, and team mates. For example:

I get a lot from my family; they're always there for me. They take me to training and competitions no matter what the weather. They're always there - when I have bad days and take it out on them, they're always there to cheer me up and turn me round. (Participant 10)

I get a lot of support from club members. Guys who don't know me come up to me before the game and have words with me; several different people may come up to me and say "We need a big performance from you again". (Participant 4)

You always play a bit better when you've got people behind you. If you know someone's taken time out of their day to give you that two to three hours, you feel more inclined to work for that last ditch tackle or play that bit harder for them if they come down to watch, and I appreciate that. (Participant 3)

Moreover:

I think getting support from rugby friends really helps because it can point out where you are maybe wrong or you shouldn't be frustrated or it can consolidate so where if a few people say "This isn't right" then you can go together to your coach and that creates more of a force. (Participant 11)

I would carry on if it wasn't, I really love the sport. Coming into it from a young age and being a part of it for so long has just made me love it. If you know there wasn't any support now from them, I don't think that would bother me in the slightest - I'd carry on. (Participant 6)

The last two quotes above show different views towards support. On the one hand, the support from team mates can be a helpful force whilst on the other hand some participants did not view it as being essential to their participation. The literature highlights that social support generally is important in both levels of sport performance: elite (Gould et al, 2002a; Greenleaf et al, 2001) and recreational (Goral, 2010).

Overall, the information on inter-personal factors has shown that the coach has a large part to play when it comes to maintaining participation levels and encouraging people to take up a sport. Coaches need to be aware of the characteristics they demonstrate and the environment they create in sessions. We conclude this section by highlighting that the findings suggest that aspects of good coaching practice manifested in recreational sport participation mirror good coaching practice manifested in elite sport participation.

### *Intra-personal factors*

The intra-personal factors discussed within the interviews concerned the participants' motivation for taking part in recreational sport (47 references from 20 participants) and the goals they set themselves, whether task (30 references from 18 participants) or ego (6 references from 5 participants). Participants' motivations varied between playing sport for simple enjoyment and personal improvement factors to being more motivated by competition. Examples of being motivated by enjoyment and improvement include:

It gives me pleasure; I like playing, I know that I'm good in volleyball so it gives me a sense of competence, something I can fulfil myself in. (Participant 1)

I like to be the best that I can be, so that motivates me as well. (Participant 12)

I always liked being active and being fit, but I guess wanting to achieve something is more than those, whether it's a personal objective or a team objective. I'm one of those people who always likes something to aim towards. I don't like doing something just for the sake of it. (Participant 5)

By contrast other participants mentioned being motivated by more competitive factors:

I just like winning. I take part because I want to win and that motivates me. I want to do well and play as well as I can play and see how far [team name] can get. (Participant 7)

I've always quite liked the physical side of it and I like the confrontation. Just winning is a good feeling and it's a horrible feeling when you lose. (Participant 3)

I think competition has motivated me a lot in the past. I wanted to be the best and I was always striving just to be the best. I always had this goal of what I wanted and that was what motivated me to get better and better. (Participant 11)

In terms of the coaches, the main motivations were associated with helping people to improve and achieve their goals as well as a being motivated through a fondness for the sport:

What motivates me is seeing people improve and the enjoyment that they get from taking part in athletics. It's a good feeling to see someone happy when they improve their personal best or win a race, so that's what motivates me to keep coaching. (Coach 1)

For me it's just a real love for the sport. I played it for so long and I just really love being involved with it. (Coach 3)

The participants within the current sample discussed setting task goals more often than they did ego goals. As such it would appear their goals were more targeted towards improvement rather than winning, although a few participants did mention ego related goals. Examples of task goal setting include "but for me the most important is to be better, to see the progress that I'm making" (Participant 1);

It tends to be time based; I want to run sub 26 for 200m. (Participant 12)

Making tackles, catching the ball, hitting the rucks; generally doing your job is as much of it as anything. (Participant 3)

By contrast, ego goals were represented through such quotes as:

I will also pick out certain teams I'd like us to beat and maybe focus on them. (Participant 9)

I want to be like the best players or one of the best players on the team. (Participant 11)

The coaches all mentioned setting their participants task related goals:

I set my athletes performance goals at the start of the season, whether it's to achieve a certain time or to qualify for a particular championship, because I believe it helps them to have a target to aim for. (Coach 1)

I just aim to make sure the team is improving in all aspects of the game - scrums, line-outs, tackling, passing. My goal is just to see them improving through my coaching. (Coach 3)

These findings concerning the motivations for participating and the goals people set themselves link to previous recreational research (Fortier, Vallerand, Briere, & Provencher, 1995; Koivula, 1999) in which recreational participants were motivated by more intrinsic experiences of enjoyment and self-improvement and their goals reflected these motivations. It would appear that recreational participants are more likely to be motivated to take part because they enjoy the sport and they want to improve their ability rather than for wanting to win matches. Equally, they are more likely to set task related goals linked to personal improvement because of these motivations. Coaches of recreational sports should be aware of these reasons and work together with the participants to set and aim for goals related to performance and not necessary outcome.

### *Environmental factors*

The final theme for participants' responses was labelled environmental factors and included aspects such as: (1) reasons (48 references from 20 participants); (2) club choice (18 references from 16 participants); (3) provision (68 references from 20 participants); (4) barriers (31 references from 17 participants); (5) frustrations and negatives (46 references from 13 participants), (6) possible reasons for reducing participation and changing club, and (7) enjoyment and other positive factors (76 references from 20 participants). There were various reasons that people became involved in their sport,

I'll try anything once so I just went in, gave it a shot and hated it the first few sessions. Having never done athletics before, I was so much slower than everyone else but after a couple of weeks I was hooked (Participant 2)

The 1995 World Cup happened and I saw Jonah Lomu and I thought "Right - I want to do what he does" so I turned up at my local rugby club. (Participant 3)

I started when I was year 7 in school. I was asked to play for the school team and that developed into playing for the local club side. (Participant 5)

There was a football team at primary school and I was the first girl and only girl to play for the team. Then from primary school I played at middle school and high school and then played for clubs outside school. (Participant 7)

The coaches also had similar reasons for coaching their sport:

I competed for the club as a junior when I was younger. My mum coaches the really young kids, so I wanted to keep involved with the club and just help out with the coaching. It can be difficult to get coaches in from outside the club so I did my training and started coaching too. (Coach 2)

It was always a sport I had an interest in and a fondness for. When my son wanted to start, I decided I would get qualified and help with his coaching, so really it was born out of being interested in it and wanting to help my son achieve a high level. (Coach 1)

The reasons for the choice of club the participants attended were based predominately on location factors:

it was just one of the only ones in the area and because I live around here, it was just it made sense. (Participant 15)

When I was growing up it made sense to join the local club - friends played there. (Participant 5)

I just looked up local clubs because I wanted to play rugby and they were the first one I saw. I contacted them and they just told me to come down, so I did. (Participant 6)

It would therefore appear that initial club choice is not down to club reputation or the level of coaching. When asked about the available provision for their sport within the local area and nationally, the responses often depended on the sport. Some examples include:

It's not enough - volleyball is not very important in this country, and for our university. So for example we have practices at 0700 on Friday, which is very difficult to wake up and participate in it. I definitely prefer to have more practices in the afternoon rather than the morning. (Participant 1)

Women's sports don't really get the recognition or the provisions they deserve because they don't get the sponsorship money or the TV money. (Participant 11)

The good thing about rugby is that you can go anywhere and find yourself a club and play whatever level you want. You can take it seriously or as socially as you like. (Participant 3)

It's definitely an easily accessible sport. Around here there are a few clubs. I've got friends at different clubs that are not too far to get to. Most the clubs are pretty welcoming and I've never heard of anyone being turned away from a club. (Participant 5)

The local area is really good for women's football. In our league you've got four teams within a 20 mile radius all competing for the same players but if you were interested in football all of those teams have different age groups so you can go in at any age group; the provision and facilities is really good. (Participant 7)

These quotes illustrate the difference in opinion for the provision of certain sports. In general the sport provision for men's rugby was extremely satisfactory along with athletics and football within the local area. Whilst the provision for women's rugby was viewed as satisfactory and reasonable, it was not at the same level as the men's game. Females felt that female sports were behind the men's in terms of quality provision. This finding may be linked to service quality mentioned earlier under the inter-personal factors category. Coaches also expressed their views related to the sport provision within their clubs:

At our club we have a good range of coaches with good experience in a range of events so that the club members can receive good coaching in a range of track and field events. (Coach 1)

The clubs in the area always seem to have at least a few coaches, so I'd say the provision is ok. (Coach 2)

I think rugby compares well to other sports, so I don't think any other sports like say football have any better facilities. A lot of the time for training you just need a pitch or a gym or whatever so it's not too hard but I think we compare well to other sports. (Coach 3)

Participants reported barriers to participation including issues such as costs and balancing commitments:

You're paying your rent, bills, food and everything else. Once you start having to pay for sport it can be £50 a week petrol money on top of that as well. (Participant 11)

It's hard balancing work and training. If I've had a long day, trying to go training can be a bit tough and sometimes I have commitments at weekends. (Participant 14)

I would like to do more rugby, but when you're working or at university that gets in the way of playing. If you have a deadline on a game day, you sometimes can't go to the games. (Participant 6)

Coaches also reported similar barriers or hindrances to their coaching, for example:

Sometimes my job means I have to be all over the place either in the UK or elsewhere in Europe so sometimes I've had to miss sessions because I've not been able to travel back in time. I have twin girls so they need looking after a lot so that can affect the time I have to coach. (Coach 2)

Alongside these potential barriers, participants also discussed the negative factors and frustrations they had with participating in recreational sport:

If I've done really badly in a competition, it makes me feel like all the hard work I put in was for nothing. That knocks my mood a bit for that whole week's training and school and stuff. (Participant 12)

I was injured pretty badly in a tackle and slipped two disks in my neck. I had about 10 months off from the sport. I was in a really bad way, got quite depressed and had to take some time off work. (Participant 3)

It frustrates me when I think a session is poorly planned or they're not willing to listen or they won't explain to us why we are doing something a certain way. (Participant 11)

A lot of our team are teachers so over the summer when we are doing pre-season training, people go on holidays so getting everybody in one place is tricky but that's nothing to do with the coach. (Participant 7)

Several findings related to barriers and constraints for participation (Burton et al, 2003; Hubbard & Mannell, 2001) echo the sentiments of the participants of this study. Moreover, the main negatives appeared to be the possibility of injuries and the negative effect of poor performance on the participant's mood. Apart from the single quote above, participants rarely had frustrations with the coach, but were often more frustrated with the commitment of other people in the team. Participants also discussed the factors that would cause them to reduce their participation and whether they would change clubs if they thought they had better opportunities elsewhere. Some of the responses in terms of reducing participation were as follows:

If I wasn't enjoying training or if I didn't get on with my team or coach then I'd probably not want to play for that team. (Participant 11)

If I had more work to do, then rugby would probably. (Participant 6)

In terms of changing clubs if they felt the coaching was not at the standard they wanted, there were mixed responses, as evident from the following quotes:

I think I'd stick with [club name]. I feel I could tell my coach if I wasn't happy and he'd change it, so I don't think I'd need to go anywhere else. (Participant 12)

If I wasn't happy with where I was, there's no reason I wouldn't look for another club. (Participant 5)

I'd probably either have a word with one of the coaches and say "Look, I think this could be done slightly better." If the coaching didn't improve after a few weeks, I would probably consider moving to a different club. (Participant 6)

As these quotes show, some participants would be willing to stick with their current club and talk to their coach about any problems whereas others would simply move clubs if they were unhappy. It may be that sport participants who did not manage to gel with the coach and/or team may be more willing to leave the club without trying to find ways to reconcile. Beaton et al (2011) explained the process of commitment in a model known as psychological continuum: awareness, attraction, attachment and allegiance. The findings may demonstrate that sport participants who are willing to leave (without first talking to coach or team members) are these who have not developed a sense of affiliation or attachment with the club, coach or team members. This has practical significance especially for maintaining sport participation and preventing drop out.

Finally, participants talked about the factors they most enjoyed about the sport and any other positives they took from participating. Examples include:

The feeling of competence - that I know that I'm good at it, also because I know I can be better. (Participant 1)

I find I just escape. It's an hour and a half of perfection. I just love it. I'd play rugby for my whole life if I could. (Participant 11)

You have to be motivated and determined; you have to be on time and you have to want to be there. That helps me with school and work as well. (Participant 12)

I feel stronger and alert. if I sat at home, I would be a cabbage. (Participant 13)

You pick up abilities like leadership, teamwork, the ability to follow. All those skills are transferable and quite useful. (Participant 9)

The coaches were also asked about the factors they enjoy most about coaching recreational sport and how they try to encourage enjoyment in their participants:

I enjoy helping the guys improve their game and using what I know from experience to help them get better. Winning games is always a great feeling, even as a coach. (Coach 3)

It's about making sure you show them you are interested in them, not just as an athlete who comes to train but as a person too so that they feel some connection. Having that helps them to enjoy the sessions more. (Coach 1)

Overall, the responses to environmental factors such as barriers are representative of the findings reported in previous recreational sport studies (Alexandris & Carroll, 1997; Burton, Turrell & Oldenburg, 2003; Hubbard & Mannell, 2001; Lera-Lopez & Rapun-Garate, 2011).

#### *Final and overarching aspects*

Participants were also asked to consider ways of (a) increasing recreational participation and (b) encouraging people to maintain their levels of participation. Examples of their responses include:

Getting out there and saying that people in this sport are usually friendly. They want to encourage you - they want to help you become better at the sport. That's what I'd do to encourage people. (Participant 6)

People know about football and rugby but they may not know about rowing or swimming or even athletics. So just try to give people more information and options to find something they like. (Participant 8)

Keep them involved. Just make it fun to begin with, so they get some enjoyment from it. You don't want to be really hard on them too soon or they will just quit. Make sure to keep it interesting too, or people get bored. (Participant 15)

In addition, participants were asked what advice they would give to coaches to increase and maintain participation in recreational sports:

Vary the sessions to keep them interesting so people want to keep coming back. You don't want to bore people. Make sure you encourage people, especially if they're new, don't just bash on them if they get things wrong. That'll just put them off, so tell them how to improve and keep them happy. (Participant 8)

Coaches have to be a lot more reflective. I don't think they consider how they are coaching sometimes. They need to educate themselves continually, which a lot of the older coaches don't tend to do. They tend to be more stuck in their ways. (Participant 11)

Make sessions fun and make people feel welcome to the group by introducing them on their first sessions. What scared me was not knowing anyone, but my coach really introduced me to everyone and that was fine. (Participant 12)

The coaches were also asked how they would improve recreational participation:

It's about getting the word out about different clubs, so we have an advert in the local paper every week along with a few pages about recent events so that people know who we are and when we train. That has helped attract a few more people. (Coach 2)

Keeping them involved; it comes down to understanding them and making sure you set out your sessions accordingly, keeping it enjoyable and making sure they improve. (Coach 1)

As is evident from the above quotes, the opinions of participants and coaches for improving recreational participation appear similar. The main factors suggested are increasing the availability of a range of sports in the local area so that people can try something different from football and rugby, and to provide fun, encouraging, interesting and inclusive environments to ensure people gain something from sessions and have a desire to continue participating. Goral (2011) explained that media (visual and print) can make a great impact in increasing and maintaining recreational sport participation. We also think that involving media and increasing media coverage may raise the profile of recreational sport and potentially raise intake.

### 3 Conclusions and Recommendations

The aim of this research was to gain an understanding of the psychological factors that influence recreational sport participation. Interviews with 20 individuals (17 participants and 3 coaches) provided an insight to the important role of the coach and the provision of quality coaching, alongside personal psychological and environmental factors that can facilitate or debilitate participation. The findings from the interviews underlined the central role of the coach in both (a) attracting individuals into a sport and (b) maintaining participation over time.

It became evident that coaches who are inter-personal (as opposed to impersonal) are more likely to create a coaching environment that is positive and preferred by the recreational sport participants. Inter-personal coaches are characterised by such qualities as being understanding, approachable, trustworthy, respectful and friendly.

Coaches who are prepared to get to know their participants' intentions and motivations of participation may further help them to create an environment that is best suited to them. Coaches will require communication skills and such inter-personal qualities as empathy, consideration and sensitivity. Communication (social, sport-related and even personal) will enable both the coach and the athlete to be on the "same page" (Jowett & Poczwadowski, 2007; Lorimer & Jowett, 2009). Being on the same page will help the planning of training sessions that meet the needs or goals of the participants while giving them appropriate levels of autonomy.

The benefits of being an inter-personal coach with good communication skills may foster a strong sporting partnership or relationship to be developed with each participant. Effective coach-athlete relationships have been found to be linked with satisfaction with sport and performance as well as motivation and wellbeing (eg Jowett & Nezelek, 2012; Adie & Jowett, 2010).

**Recommendation 1.** *Coaches require skills that reflect inter-personal (relationship) qualities and communication skills such as being trustworthy and respectful as well as listening and understanding.*

While participants expected fun and enjoyment (as opposed to dull, monotonous, unexciting and boring training), they also expected challenge and improvement in a friendly and structured environment. Coaches should be competent to provide training sessions in which each participant is developing skills and is given the necessary encouragement when they do things well. If these factors are taken into consideration, individuals will enjoy the environment and will continue to participate.

**Recommendation 2.** *Coaches require competence in the sports they coach. They need a sound appreciation of the basic principles of their sport (technical, tactical, physiological, bio-mechanical) as well as capable of providing a well-structured training session that incorporates challenge, variation and continuous feedback.*

Participants' personal motivation and goals were the two main factors emerging from the interviews as important aspects of recreational sport participation. Participants do not just want to become fit, slim and healthy; their motivation may be being the best they can be in their chosen sport. Appreciating this range of motivations and tailoring coaching sessions accordingly may be a challenge coaches will have to address. Coaches' ability to set goals with their participants is an important skill for ensuring participation is maintained.

**Recommendation 3.** *Goal setting emerged as an important aspect of recreational sport participation. Participants anticipate and prefer coaches to be aware of their intentions or goals and plan their training and development accordingly. Coaches must be aware of the importance of goal setting in recreational sport and use it effectively as part of their coaching programme.*

Finally, several factors concerned the environment that influenced recreational participation. Club choice was related to location, rather than any factors to do with reputation. It is important that local clubs and centres advertise services to the public while ensuring that participants have access to enough well-qualified coaching staff to meet local demand. Managing costs and keeping them at reasonably affordable levels should encourage people to take up sport and maintain their participation. Providing a range of activities outside normal working hours could enable people to stay engaged in recreational sport for longer.

**Recommendation 4.** *Sport clubs, leisure and recreational centres as well as other such establishments should use experienced, qualified coaches, manage costs and provide range of sport activities at various days and flexible times.*

In summary, this study uncovered that recreational sport participation is much like elite (performance) sport participation in that both appear to expect high standards of coaching from well-qualified and competent coaches who possess excellent interpersonal and communication skills. From a recreational point of view, it is important to ensure that coaches are open, approachable and understanding with a good sense of humour; they should provide enjoyable, goal-driven and learning-focused environments to recreational participants. Such coaching environments should be enjoyed in one's locality and at an affordable cost. If coaches and clubs can adhere to these core principles, we may see a long-term increase in recreational sport participation.

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### **Study, Results, Conclusions**

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