



Research Briefing

Increasing Participation in Sport: The Role of the Coach

December 2007

**Paper prepared by:
Julian North
sports coach UK
(M) 07980 584 576
(E) jnorth@sportscoachuk.org**

Contents

Executive Summary	i
1. Introduction	1
2. Where Are We With Participation?	2
3. Determinants of Participation: The Literature	3
4. Coaching and Participation: The Literature	9
5. Coaching and Participation: New Qualitative Evidence	12
6. Coaching and Participation: New Quantitative Evidence	14
7. Discussion	20
8. Future Research	22
References	23
Appendix 1 – Additional Information	28

Executive Summary

The research briefing provides an overview of the evidence and argument on increasing sport participation with particular regard to the role of coaches.

It reviews information from a number of disciplines including the sport and exercise adherence literature and coaching science. It also presents some recent results on the link between participation and coaching gathered in a UK context.

The Headline Results

- Individuals' participation in sport is related to personal, environmental, and demographic factors, as well as activity type
- This includes, for example, emphasis on enjoyment, encouragement, social support, goal setting and motivation
- The coach is uniquely positioned to establish sporting environments that emphasise these factors. In particular, the coach is well positioned to provide the individualised, responsive and dynamic environments that the research suggests are important to inducing and supporting participation
- Many sport adherence specialists have noted the important role coaches could play in stimulating participation but are surprised about how this resource has been underutilised
- Research with children and adults suggests that coaches provide participants with fun/enjoyment, encouragement, sport development, social development, confidence and lifelong involvement in sport
- Research suggests that coaches contribute to the psychological and social development of participants
- Research suggests that coaches can be used to target participation in specific communities, for example, socially excluded groups
- Coaches are already establishing sporting environments for over 5 million children and adults across the UK on a weekly basis
- Coaching is very important in Keep fit, Football, Weight training, Golf, Swimming, Movement/dance, Rugby union, Tennis, Karate and Equestrian
- There is evidence to suggest that coaching is linked to increased sports participation intensity
- 'Improved fitness' and 'enhanced fun/enjoyment' are seen as being the main benefits of coaching
- There is a need for additional research exploring the link between participation and coaching

Main Conclusions

- There is a very strong *a priori* case for increasing and sustaining participation through coaching
- There is a growing evidence base to support the role of coaches in inducing and sustaining participation
- Though many participants currently receive coaching there is evidence that it is being under-utilised as means of addressing participation issues
- The emphasis should be placed on recruiting and training high quality coaches
- The positioning of coaches and coaching roles needs to be clearly thought through
- Coaching is an essential part of the wider policies and interventions addressing sports participation

1. Introduction

Increasing participation in sport is now a major policy priority for Government and Government agencies. Children and adult participation is subject to specific Government targets, as sport is seen as providing a wide range of benefits: enjoyment, personal development, citizenship, health, education, inclusivity, amongst others¹.

Yet, sport is just one of a number of competing leisure activities – gardening, shopping, TV, video games, entertainment and culture, for example². There is evidence that sport is losing the ‘sales’ battle with these other options (Table A1 – Appendix 1). A major issue for policy makers, therefore, is how to make sports participation more attractive (amongst these options).

To increase participation it is important to understand a number of key questions: why do individuals participate in sport? What factors determine participation? Which of these factors relate to intrapersonal, interpersonal and wider environmental issues? What is the impact of existing approaches to participation improvement such as investment in facilities and clubs and, notably, coaching?

This paper considers these issues and begins to highlight the positive and central contribution coaching can make to increasing and sustaining participation, whilst bearing in mind its complementary position in relation to other investments, programmes and interventions.

Structure of the Paper

The paper begins by using evidence from the participant determinant and sport and exercise adherence literature to show the linkages to coaching, and how coaches can be used to target participants’ specific sporting and wider needs (Section 3). The paper then presents evidence on the links between participation and coaching with reference to the wider literature (Section 4), as well as some new qualitative (Section 5) and quantitative evidence (Section 6).

It is worth stressing at the outset that the paper adopts a wide definition of coaching (see the Participant Development Model; Appendix 1), where specific pre-defined coaching roles can be used to explicitly target children and adult participation issues.

¹ DCMS/Cabinet Office Strategy Unit (2002) Game Plan: A Strategy for Delivering Government’s Sport and Physical Activity Objectives, Cabinet Office Strategy Unit, London, December.

² National Statistics (2005) Time Use Survey, <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=9326&More=n>

2. Where Are We With Participation?

To set the scene it is important to understand the Government's main targets for sports participation and how we are progressing against them:

- By 2008, the Government hope to engage 75 percent of children in each School Partnership in two hours of high quality PE and school sport per week, within and beyond the curriculum.
- By 2010 the Government hope to offer all children at least four-five hours of sport made up of at least two hours of high quality PE within the curriculum and offer an additional two to three hours out of school, delivered by a range of school, community and club providers.
- In the period 2005 to 2008 the Government hope to increase the number who participate in active sports at least twelve times a year by 3%, and increase the number who engage in at least 30 minutes of moderate intensity level sports at least three times a week, by 3%.

Through a number of data sources – the DfES School Sport Survey, the Sports Coaching in the UK II survey, the Taking Part and Active People survey – it is possible to highlight progress to date against these targets (Table 1).

Result/Target		2005	2006	2007	2008	2009	2010
Children: 2 hours PE per week	Target	75%	75%	75%	85%	85%	100%
	Actual	80%(1) (61%)	-	-	-	-	-
Children: 3 hours extra-curricula and out of school sport per week	Target	N/a	N/a	N/a	N/a	N/a	100%
	Actual	-	27%(2)	-	-	-	-
Adults: Participation in the last 4 weeks	Target	54%	55%	56%	57%	58%	59%
	Actual	54% (3)	-	-	-	-	-
Adults: 3 * 30 minutes participation of moderate intensity exercise per week	Target	21%	22%	23%	24%	25%	26%
	Actual	21% (3)	-	-	-	-	-

(1) TNS (2006) 2005/06 School Sport Survey, TNS, London. Note: this figures includes 2 hours PE and extra-curricula school related sport. Only 61% of schools delivered 2 hour PE per week. Only 80% of English schools are currently involved in School Sports Partnerships.

(2) Estimate from 2006 Sports Coaching in the UK II survey. Note: based on parents' reports so caution is advised.

(3) 2006 Taking Part Survey, DCMS, London.

The results suggest that there is a considerable amount of work to be done to meet all the targets: (1) a further 39% of pupils need to receive 2 hours PE per week to meet the 2010 target (2) a further 73% of pupils will need to be 'offered' 3 hours extra curricula and out of school sport per week to meet the 2010 target (3) a further 79% of the adult population are 'available' to hit targets to engage in 3 * 30 minutes of sport per week. Though this latter figure suggests that there is a great deal of the population to work with, historical trends are not encouraging since sports participation rates, for example, in England, have remained broadly unchanged over the last two decades despite the significant boost in funding provided by the national lottery in the second half of the 1990's (Sport England, 2004a).

3. Determinants of Participation: The Literature

In attempting to address participation targets it is useful to revisit questions such as 'why do individuals participate in sport?', or 'what are the determinants of participation?'. There is a significant and growing evidence base devoted to understanding sports participation and how to increase it (see, for example, Biddle and Mutrie, 2001; Hagger and Chatzisarantis, 2005; Sport England, 2004a&b; Weinburg and Gould, 2003).

A review of the evidence³ suggests that there are three main determinants of participation: personal, environmental and demographic – the latter being a broader level analysis that combines elements of the former two (Tables 2-4)⁴. It is also important to consider the structure of the sport/exercise activity as this is seen to be an important determinant of participation (Table 5).

Before discussing these determinants in further detail, however, it is worth noting a number of important points.

1. The determinants of participation do not work in isolation; they interact and influence each other as they contribute to the behavioural outcome (Weinburg and Gould, 2003).
2. The mix of the determinants vary across the life-cycle of the participants (Biddle and Mutrie, 2003), and, indeed, within particular lifecycle stages (Prochaska et al., 1992).

Further details are provided below...

The Changing Nature of Participation Determinants and 'Individualisation'

In a review of the psychological evidence, Biddle and Mutrie (2001) suggest that determinants of sport and physical activity are complex and change across participants' life cycles. For example, for children and the young, common motives for involvement in sport are fun, skill development, affiliation, fitness, success and challenge. Younger adults are motivated by challenge, skill development and fitness. Older adults are motivated by health benefits, relaxation and enjoyment. Dwyer (1992) suggests that participants' motivations for engaging with sports, and the environments they find most rewarding - for example, recreational or competitive - are varied and highly individualised. Wankel (1980) suggest that participants' motivations for becoming involved in sport change over time, for example, from health to social reasons.

Prochaska et al., (1992), through the Transtheoretical Model, argue that individuals progress through stages of change and that movement across stages is cyclic, rather than linear, because many people do not succeed in their efforts at establishing and maintaining lifestyle changes (Marcus, Buck, Pinto and Clark, 1996). With this in mind, they argue that information and interventions need to be tailored to match the particular stage an individual is in at the time. Research has found that when the intervention is out of phase with the individuals' 'stage' attrition is high.

³ Note: there are numerous detailed and sophisticated accounts analysing the determinants of participation. The review framework provided in this paper presents a headline perspective and inevitably does not capture the detail of this theoretical and empirical work; nor does it present an exhaustive review. However, the framework closely follows the structure laid out by Weinburg and Gould (2003), with greater emphasis on more recent UK references, and is therefore deemed sufficient and appropriate for showing the link between participation and coaching.

⁴ Note: some determinants have been excluded from the analysis because they are deemed outside the control of institutions and individuals, for example, the climate.

Personal Determinants

Personal determinants of participation are broken down into three main components: psychological/psychosocial, physical, and behavioural (Table 2). The key elements relate to fun/enjoyment, self-efficacy, self-motivation, focus on process (rather than outcome), fitness and health, developing physical literacy, providing safe and appropriate sport, and habituating sport and exercise.

Determinant	Positive	Negative	Research Examples
Psychological/ psychosocial	Fun, enjoyment, confidence, self esteem, self efficacy, self motivation, physical literacy, social interaction	Lack of purpose, lack of motivation, lack of energy	<p>Enjoyment/fun seen as the most important reason for participating in sport (Rowe and Bibby, 2006; Vision 21, 2005).</p> <p>Self-efficacy (confidence) and self-motivation (intrinsic and self-determined extrinsic) have been found to be the most consistent predictors of physical activity (Cardinal, 1997; Deci and Ryan, 1985; McAuley and Courneya, 1992; Biddle and Mutrie, 2001)</p> <p>Perceptions of competence are important determinants of participation (Kirk, 2004)</p> <p>Focus on process/task more important for sustained participation than outcome (Maddux, 1997; Kimiecik, 1998; Field and Steinhart, 1992)</p> <p>Enjoyment and social benefits of participation important promotional messages; authoritarian/ prescriptive messages counterproductive (Foster et al., 2005)</p>
Physical	Fitness and health, physical literacy	Poor health, illness, injury, poor body image, lack of energy	<p>Fitness seen as the second most important reason for participating in an England study (Rowe and Bibby, 2006).</p> <p>Poor health seen as main reason for non-participation in an England study (Rowe and Bibby, 2006)</p> <p>Injury is one of the most common reasons for relapse from participation (Dishman and Buckworth, 1997).</p> <p>Poor body image seen as barrier to participation particular among women and girls (Foster et al., 2005)</p> <p>'Real life' role models seen as more appropriate than models of perfection to promote physical activity (Foster et al., 2005)</p>
Behavioural	History of sport and exercise, particularly amongst children, but also amongst young people and adults	History of sedentary behaviour, diet, smoking	<p>Past participation is the most reliable predictor of future participation (Dishman and Sallis, 1994).</p> <p>Positive early learning experiences have an impact on longer-term success and participation in sport (Cote & Hay, 2002; Kirk, 2004).</p> <p>Children who receive parental encouragement for physical activity, and who participated with friends/siblings, will be more active as adults (Wold and Anderson, 1992)</p>

Environmental Determinants

Environmental determinants of participation are broken down into two major components – social environment and physical environment. Social environment concerns family, friends and wider community networks; institutional networks such as clubs, local authorities and other sports development agencies, and wider societal changes such as (perceived) ‘time squeeze’. Physical environment concerns issues such as space, facilities and local infrastructure (Table 3).

Determinant	Positive	Negative	Research Examples
Social Env.			
Family/friends/ community networks	Socialising; supportive social networks; family, friends, community involved in sport	Family time, child care Fragmented households	Support from parent(s), spouse, family and friends has consistently been linked to physical activity (Brustad, 1992; Dishman, 1994; Kay, 2004; USDHHS, 1996) Strong community ‘buy-in’ and ownership of sport development initiatives has been shown to be very successful in Liverpool and Barrow. Strong role models seen as an essential ingredient of this (Sport England, 2006). Emphasis on social and personal development, facilitated through community workers, has been successful in the Positive Futures project (Crabbe, 2006)
Institutional networks	Institutions play a powerful role in shaping sporting environments	Lack of access to formal sports development programmes	Significant successes with Sports Action Zones in Liverpool and Barrow based on high profile role models, community buy-in and integrated approach (Sport England, 2006) Youth sport programmes provide valuable services to at risk children, but are over-burdened and under funded (Hellison and Cutforth, 1997)
Other societal changes...	Significant emphasis on body image, health, fitness, wellbeing	Time squeeze, “lack of time” Spectator culture	Perceived lack of time is one of the most prevalent reasons for non-participation (Dishman and Buckworth, 1997). There are questions whether this reflects prioritisation/motivational issues rather than time issues (see, for example, Time Use Survey, 2006) Lone parents have considerable difficulties finding the time for sport and exercise because of time constraints (GFK, 2006)
Physical Env.			
Space/facilities/ community infrastructure	Convenient, well designed, safe, local spaces/ facilities	Poorly designed community spaces Lack of access to local spaces/parks etc. Facilities too far away; too costly ‘Fearful society’ Poor transport links.	The design of the modern built environment produces significant barriers to physical activity (Sallis, 2000) Perceived convenience and actual proximity consistently affects whether someone chooses to exercise (King, Blair and Bild, 1992) Closer, community based, facilities e.g. schools, community centres are often preferable to specific sports facilities (GFK, 2006; King et al., 2000; Smith and Biddle, 1995) Cost, attractiveness and state of repair of facilities seen as an issue (Foster et al., 2005) Facilities important, but focus should be on “people as the key to success”. Need to think wider than sports facilities by taking a ‘whole environment’ approach including parks and informal open spaces (Sport England, 2006); physical environment issues were seen as less important to young women (Cox et al., 2006)

Demographic Determinants

Demographic factors show a high correlation with participation in sport (Table 4). Children and young people, men, white and mixed ethnic, able bodied and the higher socio-economic groups are more likely to participate in sport.

Table 4 Demographic Determinants Of Participation: Review of the Evidence			
Determinant	Positive	Negative	Research Examples
Demographic			
Age	Participation appears to peak about 9-11 years	Significant reduction in participation by age, particularly, during 'transition' stages	<p>Life stage changes such as leaving school, having children, children leaving home, and retirement identified as crucial. At each stage a shift in the social network occurs along with a shift in identity. These stages are recognised in a number of studies as a time when drop-out is most likely (Foster et al., 2005)</p> <p>Young women aged 15-19 considered life-transition, and lifestyle changes to be most important in determining participation (Cox et al., 2006)</p> <p>Retirees noted their changing physical capacity for sport and exercise and risk of injury. They also noted changing notions of sport and exercise with greater emphasis on fun and socialisation, and thinking of exercise in terms of activities outside sport (Arkenford, 2006; Long, 2004)</p>
Gender	Men have consistently higher participation rates than women apart from in the 44-64 age band	Girls, younger women and older women have consistently lower participation rates than men	<p>Early sporting experiences particularly with regards to PE kit, privacy, and dominance of boys, seen as being detrimental to girls' involvement in sport (Foster et al., 2005)</p> <p>Understanding of 'body image' issues important in delivering sport to women and girls (Foster et al., 2005).</p> <p>Women aged 15-19 suggested that participation amongst friends and family, and a supportive environment was important to their continued participation in sport (Foster et al., 2005; Cox et al., 2006)</p>
Ethnicity	White and mixed ethnic backgrounds	Asian and black ethnic backgrounds	Poverty and deprivation, lack of role models, racism not being taken seriously, white establishment, local good practice not utilised are some of the main reasons cited for lower participation in some Black and Ethnic Minority groups (Ploszajski Lynch Consulting, 2005)
Disability	Able bodied	Participants with a disability	Lack of transport, insufficient information about opportunities, inaccessible facilities or resources, untrained and unconfident staff or coaches, and confusion about the coordination of sport for disabled people were cited as some of the main reasons for lower participation amongst disabled young people (Fitzgerald and Kay, 2004)
Socio-economic	Higher managerial and professional occupations High income; higher educational levels	Lower socio-economic groups, economically inactive and unemployed Low income; lower education levels	<p>Research evidence evaluating successes in Liverpool and Barrow Sport Action Zones highlighted the importance of (1) highly motivated charismatic leaders who can establish credibility and respect (2) grounded bottom-up needs assessment (3) focused delivers working directly with the local community (Sport England, 2006)</p> <p>Evidence from the Positive Futures project notes the importance of a 'social and personal development' and 'grass roots' approach (Crabbe, 2006)</p>

Activity Structure Determinants

The structure of sporting and exercise activities also significantly influences participation – particular sustained participation. Sporting intensity, duration, type and group/individual structure are all seen as important.

Determinant	Positive	Negative	Research Examples
Intensity	Low intensity programmes encourage commitment from beginners/returners; also prevents chance of injury	High intensity programmes associated with drop-out	Beginner/returner programmes are most effective, in terms of long term participation, when exercising at 50% of aerobic capacity or less (Weinburg and Gould, 2003) Beginners/returners are too enthusiastic in early stages leading to likelihood of injury and drop out (Dishman and Buckworth, 1997).
Duration	Lower duration for beginners/returners	Higher duration associated with early drop out	Beginner/returner programmes are most effective when provided for a duration of 20-30 minutes (Weinburg and Gould, 2003) Participants' preferences for the intensity and duration of sport will change the more they become involved (Dwyer, 1992)
Type	Targeted sport and physical activity based on individual/community need	Assumption that individuals/communities want traditional sports	'Softer' view of sport and physical exercise with emphasis on walking, dance, gardening, yoga, rather than team sports seen as useful in low participation, more deprived areas (Sport England, 2006) and with older people (Arkenford, 2006; Foster et al., 2005) Many groups still play traditional sports (Sport England, Active People, 2007)
Individual versus Group	Group programmes	Individual programmes	Group exercise leads to longer-term participation than exercising alone. Groups offer enjoyment, social support, and increased sense of personal commitment to continue, an opportunity to compare progress and fitness levels with others (Dishman and Buckworth, 1996). One quarter of participants prefer to exercise alone

Key Messages

There are a number of key messages from the research that stand out:

- Sensitivity to participants' sporting needs and the individualisation of programmes is the key to inducing and sustaining participation
- Sensitivity to participants' life stage, cultural and demographic differences is also key
- Participants stress the importance of fun and enjoyment in sporting activity
- It is essential to build confidence/self-efficacy/self-motivation through health, fitness, skill development and social engagement; perceptions of self-efficacy are equally as important
- Emphasis should be placed on process orientation (understanding and expressing through sport) rather than on outcome orientation (health, fitness etc.)

- Emphasis on the human dimension of sport, on building relationships, communities etc.
- Lifelong sporting habits are established in childhood, particularly, with reference to strong role models, family and peer involvement, though patterns can be developed later in life
- Specific sports facilities are important, but local spaces and community structures are equally important

Determinants and Links to Coaching

Before considering the specific evidence on coaching and participation (Sections 4-6) it is worth noting the obvious connections between the determinants of participation and the role that is, or could potentially be, played by coaches.

The 'personal' determinant suggests the importance of enjoyment, encouragement, social support, focus on process and 'dissociation', goal setting and motivation. The coach is uniquely placed to deliver tailored psychological/psychosocial support and encouragement whilst providing specific instruction in the activity, and an appropriately challenging, goal orientated and motivational environment.

The 'physical' determinant suggests the importance of individually led, controlled and safe sporting environment with attention to intensity, duration, type of exercise and balance between group and individual activities. The coach is uniquely placed to establish appropriate sporting environments with emphasis on participant need.

The above are now central concerns of coach education, in particular, through the integration of 'long term participant development' models that consider the psychological, physical, social, personal, lifestyle and technical/tactical elements of participant need.

The 'family/friends/community' determinant suggests the importance of strong local role models. Coaches, with other sports leaders, already provide an important role in the community, interacting with parents, families and community groups. Many coaches are seen as community role model figures.

Coaches can be used to target specific groups, for example, the young, the old, women, specific ethnic groups, disabled athletes, and individuals in deprived and marginalised communities. As Section 7 illustrates, it all depends upon how coaching and coaches are set-up and managed – the strategic vision, recruitment, training and education, employment and deployment.

4. Coaching and Participation: The Literature

Though there is a significant literature outlining the determinants of participation, relatively fewer studies have directly investigated the role of the coach/leader in inducing and sustaining participation (Biddle and Mutrie, 2001; Weinburg and Gould, 2003). The lack of research attention on coaches' influence on participation seems remarkable given the strong linkages established in Section 3. The work that exists can be placed under three broad headings (1) studies highlighting the central role coaches can play inducing and sustaining participation because of their unique position in sport, (2) studies linking coaching to specific participants behaviours or outcomes, which have an impact on participation, and (3) studies directly linking coaching to participation.

Studies Highlighting The Role Coaches Can Play Inducing and Sustaining Participation

A number of leading researchers specialising in sport and exercise adherence, and participant development, have commented on the important role coaches can play inducing and sustaining participation. For example, Biddle and Mutrie (2001: 154) suggest... "the coach/leader could be the single most influential factor for [sporting/exercise] adherence". Weinburg and Gould (2002: 402) suggest: "When [coaches] make programmes enjoyable, satisfying, meaningful, and convenient, exercising can compete well against other leisure activities".

Weinburg and Gould (2003) go on to suggest: "most people starting a programme need extra motivation, and the coach/leaders' encouragement, enthusiasm, and knowledge are critical in this regard ... Good coaches/leaders also show concern for safety and psychological comfort, develop expertise in answering questions about exercise, and have personal qualities that participants can identify with" (Weinburg and Gould, 2003: 414). These comments echo the links between the sport and exercise adherence literature and coaching made on page 8. High quality, appropriately trained and experienced coaches, provide experiences that hook participants into sport by providing appropriate contexts, activities, encouragement and motivation – whilst recognising safety and comfort issues.

Some researchers have explored the role of the coach in terms of participant development in greater depth. For example, Fraser-Thomas et al. (2005) suggest that coaches have a 'critical role' inducing and sustaining children and young people's participation, as well as their wider sporting and life-skill development, regardless, of culture, gender, ethnicity or socio-economic status. Mageau and Vallerand (2003) have explored the role coaches could play in increasing participant motivation borrowing heavily from the wider psychology and teaching literature.

Studies linking coaching to specific participants behaviours or outcomes that have an impact on participation

Coaching and Individualisation

A major strand of research focuses on coaches' ability to cultivate individualised sporting environments, where participants receive the most appropriate kinds of activities and support. This is particularly evident in Bloom's (1985) study of talent development and Jones et al's (2004) study of effective coaching practice. Bloom (1985) traced the development of talented individuals in a number of domains, including sport, using retrospective methods. The results highlight the importance of the coach in developing talent and sustaining commitment; but also how the coach's role changes to account for the different stages of participant development (Table 6). Jones et al. (2004) provide a number of case study examples to show how effective coaching is sensitive to participant requirements, not just on a lifecycle basis, but on an hour-by-hour, minute-by-minute,

basis. This ties in well with the micro-cycles identified through Prochaska et al. (1992) Transtheoretical Model.

Stage 1 Early Years	Stage 2 Middle Years	Stage 3 Later Years
Performer	Performer	Performer
<ul style="list-style-type: none"> • Joyful • Playful • Excited • 'Special' • Fun/social orientated 	<ul style="list-style-type: none"> • Hooked/committed • Potential identified • More serious • Task/achievement orientated 	<ul style="list-style-type: none"> • Obsessed/dominates life • Personally responsible • Independent • Willingness to dedicate time and effort required for highest standards
Coach/Mentor	Coach/mentor	Coach/mentor
<ul style="list-style-type: none"> • Process centred • Kind/cheerful/caring • Notice child's giftedness 	<ul style="list-style-type: none"> • Superior technical knowledge • Strong personal interest • Respected • Strong guidance and discipline • Expected quality results 	<ul style="list-style-type: none"> • Master coach • Feared/respected • Love/hate relationship • Successful/demanding
Parents	Parents	Parents
<ul style="list-style-type: none"> • Positive • Shared excitement • Supportive • Notice child's giftedness 	<ul style="list-style-type: none"> • More moral and financial support (to maintain coach/mentor relationship) • Restrict other activities • Concerned for holistic development 	<ul style="list-style-type: none"> • Lesser role
General		
<ul style="list-style-type: none"> • Little or no emphasis on competition 	<ul style="list-style-type: none"> • Competition used a yardstick for progress 	<ul style="list-style-type: none"> • Fine tuning

Coaching and Psychological Development

US researchers Ronald Smith and Frank Smoll have undertaken a large amount of work looking at programmes to improve coaching effectiveness – through their Coaching Effectiveness Training (CET) (see, Smoll and Smith (2002) for a review). The results suggest that trained coaches were more supportive, provided more reinforcement and encouragement, and were less punitive than non-trained coaches. Participants who played for trained coaches exhibited a significant increase in self-esteem and a decrease in anxiety through the season, compared to participants from a control group. There is also evidence that the CET programme helped to create more positive and cohesive team atmospheres in youth sports and reduce attrition rates among young athletes (Barnett, Smoll and Smith, 1992; Smith and Smoll, 1997).

Horn (1985) provides evidence of coaches' impact on athlete motivation and perceptions of competence in 13-15 year old female softball players primarily through appropriate feedback and positive reinforcement (see also Black and Weiss (1992)). A review by Brustad et al. (2001) suggests that coaches have a significant impact on participants' enjoyment, satisfaction, self-esteem and perceived competence.

Coaching and Social Development

There is a growing literature showing the link between coaching and participant social development – beyond the assumed linkages highlighted by Cote (2002) and Fraser-Thomas et al. (2005). Gould and Chung (2004) highlighted the important role high school coaches have in helping adolescents develop personal and social life skills through their sports participation. Gould et al. (2007), in interviews with successful sports coaches, highlights how the coaches thought they contributed to the academic development, life skills and values of their participants. Research by Smith et al. (2005)

demonstrates the important role coaches play in providing social support to participants, as articulated by the participants themselves.

Another line of evidence highlights the importance of role models in building participation in deprived areas. Crabbe (2005) and Sport England (2006) highlight the successes strong community focused role models can have in mobilising and sustaining participation in Positive Futures projects and Sports Actions Zones. It is not stretching the logic too far to think that strong community focused coaches could play a similar role!

Coaching and Specific Communities

Research suggests that coaches can be trained to deliver sessions that have particular resonance with target groups – disaffected youth, overweight individuals etc. – using the most appropriate language and approaches. For example, evidence compiled by Sheffield Hallam University and the Women’s Sports Foundation (2004) highlights how coaching initiatives can be used to encourage female participation in coaching and sport, particularly for women and girls in ethnic groups which typically have lower levels of participation.

A review article by Sandford et al. (2006) highlights the important role played by leaders/coaches in re-engaging disaffected young people through physical activity programmes. They suggest that social relationships are more important than activity type in effecting behavioural change and, as a result, the leaders/coaches have a crucial role to play. The characteristics they emphasise are inspiration, charisma, enthusiasm, credibility and respect amongst others.

Research from the 2006 Sports Coaching in the UK II research suggests that those groups who have a lower incidence of sports participation - women, those in older age groups, individuals in lower socio-economic groups and Black and Ethnic Minorities (BEMs) - have a very positive view about coaching and its impact on participation including those who don’t currently participate. On being asked to agree or disagree with the following statement ‘good sports coaching helps increase people’s participation in sport’ ...

83% of female non-participants agreed, including 44% who agreed strongly.
86% of 60-69 year old non-participants agreed, including 48% who agreed strongly.
65% of DE socio-economic groups agreed, including 33% who agreed strongly
82% of BEMs agreed, including 48% who agreed strongly
85% of non-participants with a disability, including 46% who agreed strongly

Coaches’ Impact on Participation

A review by Wankel (1980) suggests that sports coaches/leaders are a central reason why adults continue to participate in sport.

Wankel (1984) studied a social support initiative put together by a coach/leader. The coach/leader regularly encouraged the participants to establish and maintain their home and buddy support systems, attempted to develop a positive class atmosphere, and ensured that class attendance and social support charts were systematically marked. Results showed that participants receiving social support had better attendance than did the members of a control group.

5. Coaching and Participation: New Qualitative Evidence

Section 4 alluded to the lack of evidence on the impact of coaching from the participants' perspective. Recent research with children, parents and adult participants has addressed this issue through a consultation exercise for the UK Coaching Framework (Townend, 2007).

Young Children	
Fun/enjoyment	"I like the different things Alison [the coach] makes us do, they are fun and I enjoy them"
Encouragement	"I like it because my coach shows me how to do it, because I want to be good at it, I show him what I can do and he says well done"
Development	"We get much more talented" "Coaches help you do things what you can't do" "I enjoyed learning new skills and tricks"
Older Children	
Development	"You get better at the skills and then you win the games" "It teaches you new skills that can be used in a game situation. Therefore more chances to get better"
Safety	"It stops arguments"
Parents	
Confidence	"The right way of doing things; it gives them confidence"
Development	"If you have the right coach, the kids will develop skills that allow them to perform better at the sport" "They have made significant improvements in the technique since receiving coaching"
Social Development	"Being involved with other children apart from the school friends"
Safety	"They are safe when they are with the coaches" "They learn the sport in a structured and safe way"
Adults	
Fun/enjoyment	"The more fun the coaching, the more I enjoy the sport" "When you have the right coaching the enjoyment you get out of sport is 100 times more!"
Confidence	"I feel good about myself when I can see me improve" "It has enabled me to have the confidence to enter certain tournaments knowing that I can hold my ground" "I can beat players and win tournaments which gives me personal satisfaction" "It's improved my knowledge of the game, improved my level of play and given me more confidence"
Encouragement	"Enjoy learning new skills and sharing success with my coach" "My coach motivates me and helps me to become better even when it's hard" "His attitude and personality has motivated me in games and training. It makes me want to train and guilty when I don't"
Development	"Learning new things and becoming technically competent" "Seeing how I improve over time. Being shown the correct way to do things and how to improve" "It has helped me reach a level which ... without help I am not sure I could have done"
Lifelong involvement	"I played more because I know how to play better, I get more enjoyment" "Coaching has given me something to aim for and work towards so this raises my level of participation and encourages me to compete as a way of measuring my success"

Source: Townend (2007) [UK Coaching Framework Consultation](#), sports coach UK, Leeds.

Note: The consultation involved qualitative focus groups and interviews with children, parents and adults.

Table 7 provides a qualitative illustration of the benefits of coaching from a UK perspective. In providing comment on their coaches, the children, parents and adult participants involved in the study, highlight how coaches address the participation determinants highlighted in Section 3, and reinforce the evidence on coaching presented in Section 4.

Coaches were seen to provide fun, enjoyment, encouragement, motivation, confidence, development (sporting and social), safety, and lifelong involvement in sport. The evidence also illustrates the changing emphasis of participant needs and coaching delivery against life-cycle stage. For example, fun and encouragement appear to be more important for young children; building confidence and social interaction appear more important to adult participants. This reinforces Biddle and Mutrie's (2001) comments highlighted on page 3 of this document.

6. Coaching and Participation: New Quantitative Evidence

The quantitative evidence on the uptake and use of coaching needs to be treated carefully. There is no doubt the data provides some very interesting insight into the role coaching plays in facilitating sport (as will be discussed shortly) but, importantly, it also reflects the characteristics of existing coaching provision for better or for worse.

It is worth remembering that the profile of, and investment in, coaching in the UK has historically been low compared to other occupations, for example, teaching. There is little doubt that this will impact on the quantity and quality of provision. It is perhaps important to consider what the participation and coaching take-up rates would be if more coaching opportunities were available for participants, and, in particular, high quality, athlete centred, coaching opportunities.

The Use of Coaching

Though estimates vary between surveys, between two-fifths and a third of participants had used coaching in the last 12 months; equating to a minimum of 4.6 million adults across the UK. This information is interesting, but data on the take-up of coaching 'in the last week' is perhaps more so since this reflects the long-term relationship implicit in coaching and how these relationships may impact on participation. The results suggest that only 37% of children aged 5-16 years and 6% of adults aged 16 years and over received coaching (outside school) in the last week. This represents 2.5 million children, aged 5-16 years, and 2.8 million adults. Given the benefits of coaching outlined in Sections 3, 4 and 5 – is this enough?

The Use of Coaching by Demographic Group

The take-up and intensity of coaching by age group provides some of the most useful information for understanding and managing coaching across the UK. The 2006 Sports Coaching in the UK II research allowed for analysis of both children and adult data on coaching received in the last week (Townend and North, 2007).⁵ The take-up of coaching appears to grow steadily from around a third of five year olds (32%) to a peak of nearly half (45%) of 9-11 year olds. The take-up of coaching then decreases significantly with age particularly in the transitional years post 9-11 years, for example, -9% between 9-11 and 12-14 years, -7% between 12-14 years and 15-16 years, and -15% between 15-16 years and 17-21 years. At 22 years and over only a very small proportion of the population were receiving coaching on a weekly basis.

Interestingly, women appear more likely to use coaching than men and this appears very directly related to how they participate in sport. Women tend to use coaching in fitness classes, yoga etc. where an instructor or coach is central to provision, whereas men still tend to focus more on team sports where a coach is not always necessary. As per other sports participation research, Black and Ethnic Minority groups and participants with a disability are less likely to use coaching than, for example, White groups or able bodied participants (Townend and North, 2007).

⁵ The following analysis excludes coaching associated with schools either during curriculum time or extra-curricula, though this analysis is available and the results indicate – as stated elsewhere in the report – that there is significant activity.

Table 8 Those receiving coaching in the last week Number of coaching hours received per week by age Percentage							
	% Receiving coaching in last 12 months	15+ hrs per week	10+ hrs per week	6+ hrs per week	3+ hrs per week	2/1.5 hrs per week	>1.5 hrs per week
Children's data:							
5 years	32	1	0	<1	13	20	66
6-8 years	37	0	1	3	23	32	41
9-11 years	45	<1	2	4	29	35	29
12-14 years	36	1	1	8	37	31	23
15-16 years	29	0	4	13	42	20	21
Adults data:							
16 years	25	6	0	12	50	29	4
17-21 years	14	7	5	13	25	26	25
22-29 years	8	2	1	9	30	30	26
30-39 years	6	1	1	3	22	51	23
40-49 years	6	0	3	4	24	34	35
50-59 years	4	2	3	>1	7	50	38
60-69 years	3	0	0	6	22	43	29
70 years +	2	0	0	0	10	28	62

Source: Townend and North (2007) Sports Coaching in the UK II, sports coach UK, Leeds, October.

Base: All Adults (16+ years) who have received coaching in the last 12 months

Children's data is based on: All adults with children who have received coaching in the last 12 months

Note: Percents may not total 100 due to rounding

The Use of Coaching by Sport

Analysis of the use of coaching by sport is interesting because it highlights some of the broader structures underlying coaching take-up and provision. It shows which of the mass participation sports utilise coaching within their provision (Table 9), which are the most coached sports in terms of participant numbers (Table 10), and which sports are reliant on coaching for provision (Table 11).

Table 9 Top Ten Participation Sports Participants Receiving Coaching; % Use of Coaching			
	Participation Last 12	Received Coaching Last 12	% Receiving Coaching
Swimming	11,359,000	290,000	2.6
Cycling	5,721,000	46,000	0.8
Football	5,572,000	493,000	8.8
Keep Fit/Yoga/Exercise	4,878,000	1,224,000	25.1
Golf	3,514,000	354,000	10.1
Running/Jogging	2,806,000	124,000	4.4
Weight Training/Lifting	2,041,000	388,000	19.0
Tennis	1,998,000	190,000	9.5
Tenpin Bowling/Skittles	1,709,000	8,000	0.5
Badminton	1,701,000	102,000	6.0

Source: 2006 Sports Coaching in the UK II

Note: Tables coded to reflect intensity of use: Gold (highest use), Silver (moderate use), Bronze (low use).

In terms of mass participation sports, 'Keep fit' and 'Weight training' stand out as the sports where coaches are involved (Table 9). Over 1 million adults, or 25%, of all 'Keep fit' participants used a coach or instructor in the last 12 months. Coaching, however, is also important to the delivery of Football (493,000 adults received coaching in the last 12 months), Golf (388,000 in the last 12 months) and Swimming (290,000 in the last 12 months).

	Participation Last 12	Received Coaching Last 12	% Receiving Coaching
Keep Fit/Yoga/Exercise	4,878,000	1,224,000	25.1
Football	5,572,000	493,000	8.8
Weight Training/Lifting	2,041,000	388,000	19.0
Golf	3,514,000	354,000	10.1
Swimming	11,359,000	290,000	2.6
Movement/Dance	1,064,000	259,000	24.4
Rugby Union	629,000	232,000	36.9
Tennis	1,998,000	190,000	9.5
Karate	402,000	187,000	46.5
Equestrian	656,000	167,000	25.4

Source: 2006 Sports Coaching in the UK II

Note: Tables coded to reflect intensity of use: Gold (highest use), Silver (moderate use), Bronze (low use).

In addition, to Keep fit, Weight training, Football, Golf and Swimming identified above, it is clear that there is also a great deal of coaching occurring in 'movement/dance', Rugby Union (232,000 adults received coaching in the last 12 months) and in Tennis (190,000 adults in the last 12 months) (Table 10).

	Participation Last 12	Received Coaching Last 12	% Receiving Coaching
Karate	402,000	187,000	46.5
Judo	181,000	82,000	45.3
Rugby League	165,000	62,000	37.3
Rugby Union	629,000	232,000	36.9
Equestrian	656,000	167,000	25.4
Keep Fit/Yoga/Exercise	4,878,000	1,224,000	25.1
Movement/Dance	1,064,000	259	24.4
Climbing	586,000	134	22.8
Gymnastics	382,000	86	22.5
Hockey	242,000	54	22.5

Source: 2006 Sports Coaching in the UK II

Note: Tables coded to reflect intensity of use: Gold (highest use), Silver (moderate use), Bronze (low use).

There are clearly some sports where participation is unlikely to occur without the involvement of coaches or instructors (Table 11). In this sense, coaching may be necessary for participation to occur. For example, the martial arts such as Karate (47% of participants have received coaching in the sport in the last year) and Judo (45%)

require an instructor so participants can learn the technical details of the sport in a safe and appropriate manner. Similar technical/safety issues may explain the high incidence of coaching in equestrian (25%), climbing and gymnastics (both 23%). Rugby League and Union (both 37%) also appear to require the involvement of a coach – perhaps as results of the formalised team structure, which characterises participation in these sports, and for safety reasons. Similar structural/cultural issues are likely to be occurring in hockey. Fitness instructors may also provide a motivational climate for participants to take part in classes.

The Use of Coaching and Participation Frequency

Perhaps some of the most interesting data on the use of coaching to facilitate participation relates to coaching and participation frequency (Table 12). Though there are issues about the direction of causality, the evidence suggests that the more individuals participate – i.e. at least once a year, at least once a month, or in the last week – the more they are likely to use coaching. For example, only 18% of participants who participated in the last year used coaching, compared to 35% in the last week.

Table 12 Adult Use of Coaching Results From Three Surveys		
	Sports Coaching in the UK II	Active People (England Only)
Participated in last 12 months	18%	N/a
Participated in the 4 weeks	21%	30%
Participated in last week (3*30 mins)	N/a	35%

The differences in the figures are likely to result from one or more of the following:

- (1) Variation in questions – Sports Coaching in the UK II question on coaching relates more to sport, Active People relates more to sport and recreation; Active People is also tighter in defining participation.
- (2) Sports Coaching in the UK II covers the whole UK, whereas Active People covers England only; the results suggest that with the exception of Wales, England has the highest take-up of coaching across the UK.

This may be direct quantitative evidence of the impact of coaching on participation levels. That is, the benefits coaches provide in terms of enjoyment, motivation, confidence, development etc. are encouraging participants to play sport more frequently. This issue requires further research.

The Benefits of Coaching

As part of the 2006 Sports Coaching in the UK II survey, participants who were receiving coaching were asked what benefits coaching had brought to them. More than two-thirds (69%) stated that coaching had improved their fitness, with over half suggesting that it had enhanced their fun (54%) and / or allowed them to learn something new (52%) (Table 13). Only 13% believed that they had to receive coaching because it was the only way to access a particular sport.

Table 13						
All coached participants by perceived benefits of coaching						
Number and percentage						
	Received coaching in last 12 months		Received coaching in the last month		Received coaching in the last week	
	N	%	N	%	N	%
Improved my fitness	3,142,000	69	2,350,000	75	1,954,000	78
Enhanced my fun/enjoyment	2,445,000	54	1,740,000	55	1,370,000	54
I learned something new	2,386,000	52	1,651,000	53	1,346,000	54
Developed my sporting skills	1,913,000	42	1,316,000	42	1,085,000	43
Improved sporting performance	1,717,000	38	1,255,000	40	1,024,000	41
Enhanced my social life	1,196,000	26	973,000	31	803,000	32
Improved commitment to sport	996,000	22	778,000	25	636,000	25
Developed my life skills	877,000	19	697,000	22	559,000	22
Enabled me to access a sport	603,000	13	421,000	13	348,000	14
Other	162,000	4	91,000	3	84,000	3
Total	4,571,000		3,139,000		2,518,000	
N=	797		550		450	

Source: Townend and North (2007) *Sports Coaching in the UK II*, sports coach UK, Leeds, October.

Base: All Coached Participants (16+ years)

Note: Percents total more than 100 as each coach could give more than one answer

Note: The base number differs to that in Tables 4, 7, and 8, due to missing answers / no responses

One interesting element of the data presented in Table 13 is the stability of perception of benefits of coaching compared to coaching intensity, with the exception of fitness improvements. The only benefit that appears to be reported more as the intensity of the coaching increases from 'received in the last 12 months' to 'received in the last week', for example, is 'improved my fitness' (69% to 78%). All the other benefits such as 'fun/enjoyment' and 'develop sporting skills' remain remarkably constant against coaching intensity.

Table 14						
All coached participants by perceived benefits of coaching						
Number and percentage						
	Male Participants		Female Participants		All Participants	
	N	%	N	%	N	%
Improved my fitness	1,365,000	59	1,778,000	79	3,143,000	69
Enhanced my fun/enjoyment	1,208,000	52	1,237,000	55	2,445,000	54
I learned something new	1,247,000	54	1,139,000	50	2,386,000	52
Developed my sporting skills	1,272,000	55	641,000	28	1,913,000	42
Improved sporting performance	1,044,000	45	673,000	30	1,717,000	38
Enhanced my social life	578,000	25	621,000	27	1,199,000	26
Improved commitment to sport	627,000	27	372,000	16	999,000	22
Developed my life skills	540,000	23	336,000	15	877,000	19
Enabled me to access a sport	319,000	14	284,000	13	603,000	13
Other	50,000	2	112,000	5	162,000	4
Total	2,310,000		2,264,000		4,574,000	
N=	386		413		799	

Source: Townend and North (2007) *Sports Coaching in the UK II*, sports coach UK, Leeds, October.

Base: Participants receiving coaching in the last 12 months (16+ years)

Note: Percents total more than 100 as each coach could give more than one answer

Note: The base number differs to that in Tables 4, 7, and 8 due to missing answers / no responses

It is interesting to note that female participants were more likely than male participants to think that coaching improved their fitness (79% and 59% respectively) (Table 14). This is likely to be a reflection of the type of sports undertaken by women and men, with high numbers of women participating in aerobic-type fitness classes. In comparison, male participants were far more likely than female participants to suggest that coaching developed their sporting skills (55% and 28% respectively) or improved their sporting performance (45% and 30% respectively).

7. Discussion

This briefing has pulled together evidence from a number of different sources (1) the sporting and exercise adherence literature with particular emphasis on participation determinants (2) the existing literature on coaching and participation (3) new UK qualitative and quantitative evidence on coaching and participation. The purpose of the following section is to pull the evidence together into a coherent discussion around increasing participation: the role of coaches. The discussion is organised around a number of themes.

There is a very strong *a priori* case for increasing and sustaining participation through coaching

There is an excellent match between what individuals want from participating in sport and what good coaches provide. Participants want sporting environments that emphasise fun, enjoyment, a potential to develop and socialise. They want environments where they feel secure, confident, motivated and are effective. They want their individual needs to be reflected in the structure of the sporting activity, in the environment or setting, yet to feel part of a group or community.

Good, athlete centred, coaching would establish sporting environments that ticked all these boxes. Coaches provide the encouragement and engagement; they are locally based community 'role models'. (Indeed, it is difficult to see which other human agency complements the participants requirements quite so comfortably.) The question is not whether coaching can help, but rather what kind of coaching is needed, and how is this coaching supported.

There is a growing evidence base to support the role of coaches in inducing and sustaining participation

The research suggests that good coaches provide participants with the individualised sporting environments they require. They provide participants with fun, engaging and motivating sport; they focus on individual development with appropriate intensity, duration, instruction, goal setting and feedback. They provide the individuals with the skills and confidence to enjoy sport and enjoy being part of a sports setting. They are able to tailor sporting environments to meet the needs of particular groups: the young/old, men/women/mixed, individual cultural/ethnic groups etc.

There is specific evidence to suggest that participants who have received coaching have longer participation duration and lower attrition rates than participants who have not received coaching.

Though many participants currently receive coaching there is evidence that it is being under-utilised as means of addressing participation issues

Despite the central position of coaches as the deliverers of sport there are questions about whether it is being appropriately utilised. Perhaps only a quarter of children and less than one in ten adults use coaching regularly as part of their participation in sport. There is evidence that adults have tried to access coaching but have been unable to find any availability.

If the coverage and, it must be said, the quality of coaching were improved there is strong evidence to suggest that it could be used to target particular participant groups, delivering appropriate sporting opportunities, increasing commitment to participation, and to bring new people into sport.

The emphasis should be placed on high quality coaches

Good coaching focuses on participant need both in terms of setting up the initial sporting environment and then guiding participant development. Good coaches are trained to understand the needs of particular participant groups - what is fun in a sporting context, what is appropriate skill development, what kind of session emphasises fitness, relaxation and enjoyment. To do this they must be the right kind of people with the right kind of education, training and experience.

It is important to recognise that bad coaching is likely to be as detrimental, as good coaching is conducive, to increasing and sustaining participation. The literature provides many examples of bad coaching practice, and bad coaches (Gilbert et al., 2001). Therefore, it is essential to build recruitment, development and deployment systems around coaches and participants to ensure that the obvious benefits of coaching are 'assured' and that any negatives are minimised.

The positioning of coaches and coaching roles needs to be clearly thought through

There is (perhaps) a wider misconception about what coaches do and what kind of participants they work with. The positioning of coaching in relation to the participation or other agendas, and how coaches work with similar/overlapping occupations is crucial. The work associated with the Participant Development Model and Coaching Roles model will be central to mapping out what coaches should be doing to increase and sustain participation (as well other agendas such as developing performance). The Active People survey data will be crucial in developing participant profiles that can be specifically targeted by coaches amongst a range of other interventions. The Participation Development Model, Coaching Roles Model and Segmentation diagram are included in Appendix 1.

Coaching is an essential part of the wider policies and interventions addressing sports participation

The evidence supporting the role coaches can play inducing and sustaining participation is strong; but it should not be seen as separate or distinct from the wider sports development context which involves developing volunteers, clubs and facilities.

The research suggests that just as the participation determinants work together and are transient over time, so the interventions aimed at increasing participation must work together and be flexible enough to change to individual circumstances. For example, evidence from a recent evaluation of the Community Sports Coach scheme suggests that sustainable club structures supported by CSCs, provide an excellent platform for creating and sustaining participation opportunities (Bickerton et al., 2007).

8. Future Research

The following section provides an overview of some important research questions (Q) and possible projects (P) to address these questions:

Understanding Participation

Q. A greater understanding of how participation changes across life stages, in particular, 'transition stages' is required (Foster et al., 2005).

Q. A greater understanding of the needs/requirements of individuals (regardless of age) at the critical entry and re-entry points into sport.

Q. A greater understanding of the impact of growing confidence on participants motivations to be involved in sport, for example, from fun to learning and development.

P. Panel based participant tracking research including coaching as an independent variable.

Q. How do participants develop over time and in different pathways?

Q. What sporting experiences best suit their development and sustain their interest in sport?

P. Participant development literature meta analysis; participant development intervention evaluation.

Q. A greater understanding of how participation is situated in the social context of the individual – the role of social networks etc. (Foster et al., 2005).

P. Detailed qualitative research (note: Sport England has already begun this work but more groups needs to be explored)

Understanding Participation: The Role of the Coach

Q. A greater understanding of how coaches induce and sustain participation in sport – with focus on gathering impact evidence.

P. Participant-coach case studies in a participation context

P. Community Sports Coach participant research

Q. A greater understanding of how coaches contribute to the motor skill and social development of participants.

P. Focused evaluation studies

References

- Arkenford (2006) Understanding Participation in Sport: What Determines Sports Participation Among Recently Retired People?, Arkenford and Sport England, London, February.
- Barnett, N P, Smoll, F L and Smith, R E (2002) 'Effects of Enhancing Coach-Athlete Relationships on Youth Sport Attrition', The Sports Psychologist, 6, 111-127.
- Bickerton, P, Townend, R and Guise, S (2007) Community Sports Coaching Scheme Evaluation Report, sports coach UK, Leeds.
- Biddle, J H and Mutrie, N (2001) Psychology of Physical Activity, Routledge, London.
- Black, S J and Weiss, M R (1992) 'The Relationship Among Perceived Coaching Behaviours, Perceptions of Ability, and Motivation in Competitive Age-Group Swimmers', Journal of Sport & Exercise Psychology, 14, 309-325.
- Bloom, B S (1985) Developing Talent in Young People, Ballantine, New York.
- Bronfenbrenner, U (1999) 'Environments in Developmental Perspective: Theoretical and Operational Models', in Friedman, S L and Wachs, T D (Eds), Measuring Environment Across the Life Span: Emerging Methods and Concepts, American Psychological Association, Washington.
- Brustad, R J (1992) 'Integrating Socialisation Influences into the Study of Children's Motivation in Sport', Journal of Sport and Exercise Psychology, 14, 59-77.
- Brustad, R J, Babkes, M L and Smith, A L (2001) 'Youth in Sport: Psychological Considerations', in Singer, R N, Hausenblas, H A and Janelle, C M (Eds) Handbook of Sport Psychology, Wiley, New York.
- Cardinal, B J (1997) 'Psychological and Organisational Factors Related to Burnout in Athletic Trainers', Research Quarterly for Exercise and Sport, 57, 321-328.
- Carlson, R (1988) 'The Socialization of Elite Tennis Players in Sweden: An Analysis of the Players' Backgrounds and Development', Sociology of Sport Journal, 5, 241-256.
- Cote, J (2002) 'Coach and Peer Influence on Children's Development Through Sport' in Silva, J M and Stevens, D (Eds) Psychological Foundations of Sport, Merrill, Boston.
- Cote, J & Hay, J (2002) 'Children's Involvement in Sport: A Developmental Perspective' in Silva, J M and Stevens, D (Eds) Psychological Foundations of Sport, Merrill, Boston.
- Cox, L, Coleman, L and Roker, D (2006) Understanding Participation in Sport: What Determines Sports Participation Among 15-19 Year Old Women?, Trust for the Study of Adolescence, Sport England, London, January.
- Crabbe, T (2006) Knowing the Score: Positive Futures Case Study Research: Final Report, Home Office, London, November.
- Deci, E L and Ryan, R M (1985) Intrinsic Motivation and Self-Determined Human Behaviour, Plenum Press, New York.
- Dishman, R K (1994) Advances in Exercise Adherence, Human Kinetics, Champaign.

Dishman, R K and Buckworth, J (1996) 'Increasing Physical Activity: A Quantitative Synthesis', Medicine and Science in Sport and Exercise, 28, 706-719.

Dishman, R K and Buckworth, J (1997) 'Adherence to Physical Activity' in Morgan, W P (Ed) Physical Activity and Mental Health, Taylor and Francis, Philadelphia.

Dishman, R K and Sallis, J F (1994) 'Determinants and Interventions for Physical Activity and Exercise' in Bouchard, C, Shepard, R J and Stephens, T (Eds) Physical Activity, Fitness and Health, Human Kinetics, Champaign.

Dwyer, J J M (1992) 'Informal Structure of Participation Motivation Questionnaire Completed by Undergraduates', Journal of Applied Sport Psychology, 31, 674-685.

Field, L and Steinhart, M (1992) 'The Relationship of Internally Directed Behaviour to Self-Reinforcement, Self Esteem, and Expectancy Value for Exercise', American Journal of Health Promotion, 7, 21-27.

Fitzgerald, H and Kay, T (2004) Sports Participation by Disabled Young People in Derbyshire, Loughborough University, Loughborough, June.

Foster, C, Hillsdon, M, Cavill, N, Allender, S and Cowburn, G (2005) Understanding Participation in Sport, Sport England, London, September.

Fraser-Thomas, J L, Cote, J and Deakin, J (2005) 'Youth Sport Programs: An Avenue to Foster Positive Youth Development', Physical Education and Sport Pedagogy, 10, 1, 19-40.

GFK (2006) Understanding Participation in Sport: What Determines Sports Participation Among Lone Parents?, Sport England, London, July.

Gilbert, W D, Gilbert, J N and Trudel, P (2001) 'Coaching Strategies for Youth Sports: Part 1: Athlete Behaviour and Athlete Performance', Journal of Physical Education, Recreation and Dance, 72, 29-33.

Gould, D, Chung, Y, Smith, P and White, J (2006) 'Future Directions in Coaching Life Skills: Understanding High School Coaches' Views and Needs', Athletic Insight On-line, 8, 3, September.

Gould, D, Collins, K, Lauer, L and Chung, Y (2007) 'Coaching Life Skills Through Football: A Study of Award Winning High School Coaches', Journal of Applied Sport Psychology, 19, 16-37.

Hagger, M and Chatzisarantis, N (2005) The Social Psychology of Exercise and Sport, Open University Press, Maidenhead.

Hellison and Cutforth (1997)

Horn, T S (1985) 'Coaches' Feedback and Changes in Children's Perceptions of their Physical Competence', Journal of Educational Psychology, 77, 174-186.

Jones, R, Armour, K and Potrac, P (2004) Sports Coaching Cultures: From Practice To Theory, Routledge, London.

Kimiecik, J (1998) 'The Path of the Intrinsic Exerciser', IDEA Health and Fitness Source, March, 34-42.

Kay, T (2004) 'The Family Factor in Sport: A Review of Family Factors Affecting Sports Participation', in Sport England, Driving Up Participation: The Challenge for Sport, Sport England, London.

King, A C, Blair, S N and Bild, D (1992) 'Determinants of Physical Activity and Interventions in Adults', *Medicine and Science in Sport and Exercise*, Supplement 24, 221-236.

King, A C, Castro, C, Wilcox, S, Eyler, A A, Sallis, J F and Brownson, R C (2000) 'Personal and Environmental Factors Associated with Physical Inactivity Among Different Racial-Ethnic Groups and Middle-Aged and Older-Aged Women', *Health Psychology*, 19, 354-364.

Kirk, D (2004) 'Sport and Early Learning Experience', in Sport England (Ed) Driving Up Participation: The Challenge for Sport, Sport England, London.

Long, J (2004) 'Sport and the Ageing Population: Do Older People Have a Place in Driving Up Participation in Sport', in Sport England, Driving Up Participation: The Challenge for Sport, Sport England, London.

Maddux, J (1997) 'Health, Habit and Happiness', *Journal of Sport and Exercise Psychology*, 19, 331-346.

Marcus, B H, Buck, B C, Pinto, B M and Clark, M M (1996) 'Exercise Initiation, Adoption and Maintenance', in Van Raalte, J W and Brewer, B W (Eds) Exploring Sport and Exercise Psychology, American Psychological Association, Washington.

McAuley, E and Courneya, K S (1992) Self-efficacy and Attributional Processes in Physical Activity, in Horn, T (Ed) Advances in Sport Psychology, Human Kinetics, Champaign.

MORI (2004) Sports Coaching in the UK, Sports Coach UK, Leeds, September.

Ploszajski Lynch Consulting Ltd (2005) Increasing BME Participation in Sport and Physical Activity by Black and Ethnic Minority Communities, Ploszajski Lynch Consulting Ltd, January.

Prochaska, J O, DiClemente, C C and Norcross, J C (1992) 'In Search of How People Change', *American Psychologist*, 47, 1102-1114.

Rosen, C S (2000a) 'Exercising for Older Patients: Why It's Worth Your Efforts', *Geriatrics*, 48, 68-77.

Rosen, C S (2000b) 'Is the Sequencing of Change Processes by Stage Consistent Across Health Problems? A Meta-Analysis', *Health Psychology*, 19, 593-604.

Rowe, N and Bibby, H (2006) 'Active Sport' in DCMS (2006) Taking Part: The National Survey of Culture, Leisure and Sport, Annual Report 2005/2006, DCMS, London.

Sallis, J F (2000) Environmental Influences on Physical Activity: Applying Ecological Models, *Journal of Sport and Exercise Psychology*, 22, 51.

Sallis, J F and Owen, N (1999) Physical Activity and Behavioural Medicine, Sage, Thousand Oaks.

Sandford, R A, Armour, K M and Warmington, P C (2006) 'Re-engaging Disaffected Youth Through Physical Activity Programmes', British Educational Research Journal, 32, 2, 251-271.

Sheffield Hallam (2004) Women, Girls, Sport and Physical Activity - Case Studies - What Works for Yorkshire, Sheffield Hallam University and Women's Sports Foundation, Sheffield, April.

Smith, R A and Biddle, S J H (1995) 'Psychological Factors in the Promotion of Physical Activity', in Biddle, S J H (Ed) European Perspectives on Exercise and Sport Psychology, Human Kinetics, Champaign.

Smith, R E and Smoll, F L (1997) 'Coach Mediated Team Building in Youth Sports', Journal of Applied Sport Psychology, 9, 114-132.

Smith, R E and Smoll, F L (2002) 'Coaching Behaviour Research and Intervention in Youth Sports', in Smoll, F L and Smith, R E (Eds) Children in Youth Sport: A Biopsychosocial Perspective, Kendal Hunt, Dubuque.

Smith, S L, Fry, M D, Ethington, C A and Li, Y (2005) 'The Effects of Female Athletes' Perceptions of Their Coaches' Behaviours on their Perceptions of the Motivational', Journal of Applied Sport Psychology, 17, 170-177.

Sport England (2004a) Driving Up Participation: The Challenge for Sport, Sport England, London.

Sport England (2004b) The Framework for Sport in England - Making England an Active and Successful Sporting Nation: A Vision For 2020, Sport England, London.

Sport England (2006) Understanding the Success Factors in Sport Action Zones, Sport England, September.

Townend, R (2007) UK Coaching Framework Consultation, sports coach UK, Leeds.

Townend, R and North, J (2006) Sports Coaching in the UK II, sports coach UK, Leeds, October.

US Department of Health and Human Services (1996) Physical Activity and Health: A Report of the Surgeon General, Department of Health and Human Services, Washington.

Vanreusel, B et al. (1997) 'Longitudinal Study of Youth Sport Participation and Adherence to Sport in Adulthood', International Review for the Sociology of Sport, 32, 4, 373-387.

Vision 21 (2005) A Qualitative Appraisal of Everyday Sport: Understanding the Drivers and Barriers to Participation in Sport and Physical Activity, Vision 21, Manchester, August.

Wankel, L M (1980) 'Involvement in Vigorous Physical Activity: Considerations for Enhancing Self-motivation' in Danielson, R R and Danielson, K F (Eds) Fitness Motivation: Proceedings of the Geneva Workshop, Ontario Research Council on Leisure, Toronto.

Wankel, L M (1984) 'Decision Making and Social Support Structures of Increasing Exercise Adherence', Journal of Cardiac Rehabilitation, 4, 124-128.

Weinburg, R S and Gould, D (2003) Foundations of Sport and Exercise Psychology, Human Kinetics, Champaign.

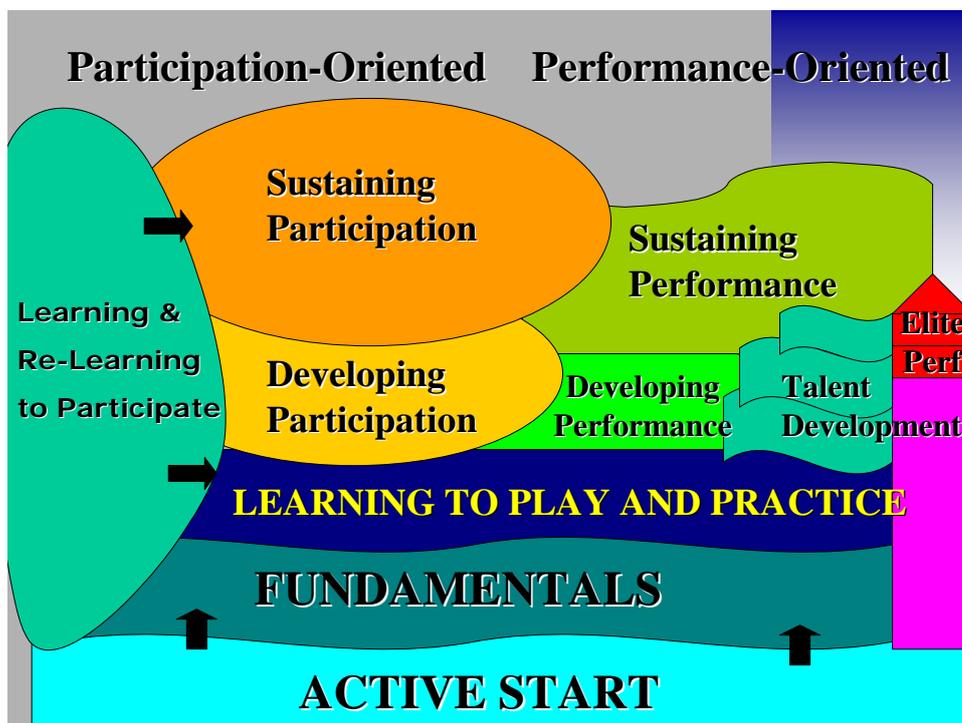
Wold, B and Anderson, N (1992) 'Health Promotion Aspects of Family and Peer Influences on Sport Participation', International Journal of Sport Psychology, 23, 343-359.

Appendix 1 – Additional Information

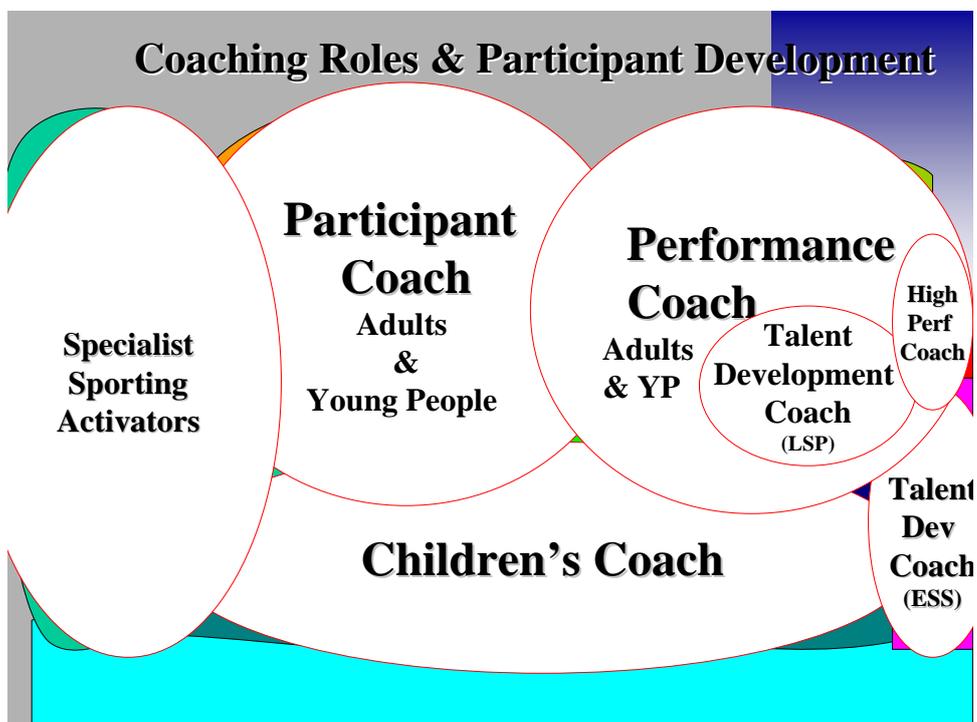
Table A1 Participation rates (%) and time spent on <u>main activities</u> per day by gender, Great Britain, 2005						
	Men		Women		All	
	%	Mins	%	Mins	%	Mins
Sleep	100	484	100	498	100	491
Eating & Drinking	97	85	97	79	97	82
Personal care i.e. wash/dress	91	40	93	48	92	44
TV, Video, DVD, Radio, Music	82	170	78	145	80	157
Cooking, washing up	57	27	81	54	70	41
Rest	50	43	52	48	51	46
Paid work	46	211	33	132	39	170
Cleaning, tidying	21	13	54	47	38	31
Shopping, appointments	32	27	42	40	37	34
Spending time with family/friends at home	27	42	38	57	33	50
Reading	26	23	30	26	28	24
Washing clothes	6	4	30	18	19	11
Caring for own children	11	15	21	32	16	24
Contact with friends/family	12	7	19	9	15	8
Going out with friends/family	16	28	12	21	14	24
Repairs and gardening	15	23	12	11	13	17
Pet care	11	6	14	7	13	7
Sport & Outdoor Activities	12	13	8	7	10	10
Caring for other children	5	7	7	10	6	9
Formal education	4	11	4	11	4	11
Entertainment and culture	3	5	4	5	3	5
Caring for other adults in own household	2	2	2	1	2	1
Caring for adults other household	2	2	2	3	2	2
Voluntary work	2	3	2	3	2	3
Recreational study	2	4	2	4	2	4

Source: Office for National Statistics (2006) 2005 Time Use Survey, ONS, July.

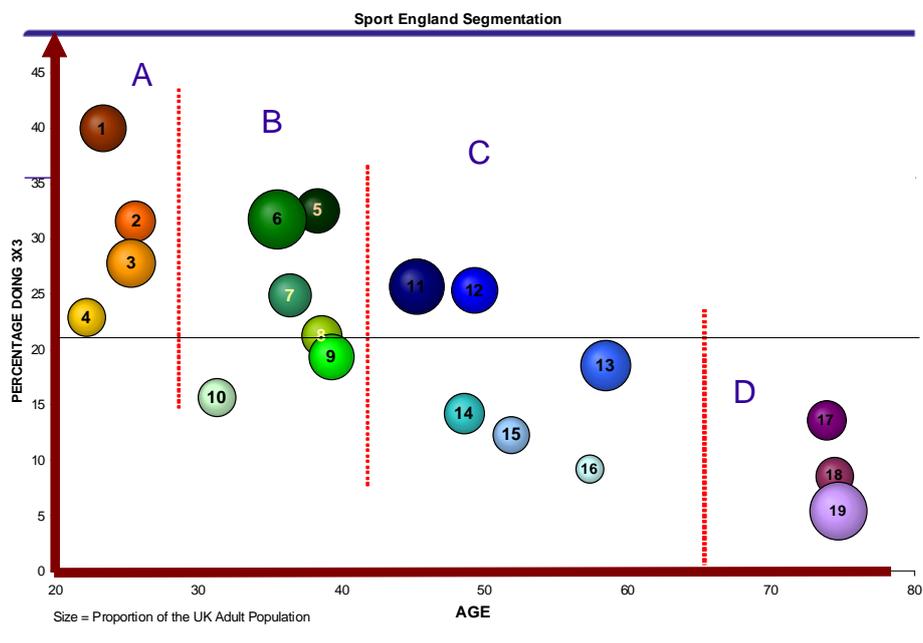
UK Coaching Framework – (Draft) Participant Development Model



Participant Development Model: Coaching Roles



Active People Segmentation



Club membership, tuition and organised competition

Segment Name	Forename (s)	Organised competition	Received tuition	Health / fitness clubs	Social club that does physical recreation	Sports clubs	Other club for physical recreation
Competitive Male Urbanites	Ben	Green	Red	Green	Green	Green	Green
Sports Team Drinkers	Jamie	Green	Red	Green	Green	Green	Green
Fitness Class Friends	Chloe	Green	Red	Green	Green	Green	Green
Supportive Singles	Leanne	Green	Red	Green	Green	Green	Green
Career Focussed Females	Helena	Green	Red	Green	Green	Green	Green
Settling Down Males	Tim	Green	Red	Green	Green	Green	Green
Stay at Home Mums	Alison	Green	Red	Green	Green	Green	Green
Middle England Mums	Jackie	Green	Red	Green	Green	Green	Green
Pub League Team Mates	Kev	Green	Red	Green	Green	Green	Green
Stretched Single Mums	Paula	Green	Red	Green	Green	Green	Green
Comfortable Mid-Life Males	Philip	Green	Red	Green	Green	Green	Green
Empty Nest Career Ladies	Elaine	Green	Red	Green	Green	Green	Green
Early Retirement Couples	Roger and Joy	Green	Red	Green	Green	Green	Green
Older Working Women	Brenda	Green	Red	Green	Green	Green	Green
Local 'Old Boys'	Terry	Green	Red	Green	Green	Green	Green
Later Life Ladies	Norma	Green	Red	Green	Green	Green	Green
Comfortable Retired Couples	Ralph and Phyllis	Green	Red	Green	Green	Green	Green
Twilight Years Gents	Frank	Green	Red	Green	Green	Green	Green
Retirement Home Singles	Elsie and Arnold	Green	Red	Green	Green	Green	Green

Competition is dominated by men. Tuition is more spread though seems to be used by the better off segments. Health clubs are the preserve of the young and well off. Sports clubs and wider interest clubs may target some older segments

Source: Experian/Taking Part/Active People