

**Sporting Success, Role Models and
Participation:
A Policy Related Review**
Research Report no. 101

*A research study for **sportscotland***

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Published by:

© **sportscotland**
Caledonia House, South Gyle
Edinburgh, EH12 9DQ
Tel: 0131 317 7200
www.sportscotland.org.uk

ISBN 978 1 85060 552 2
January 2009

***sportscotland** is the trading name of the Scottish Sports Council*

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Foreword

Sports development policy like most social policy tends to emerge through commonsense – occasionally intuitive – assumptions about ‘what works’. Given the enormous difficulty of demonstrating causal effect in these areas, such pragmatism is unsurprising. The alternative is to put action on hold until it can be supported by the clear demonstration of complex causal relationships – in short, paralysis by analysis.

This is not an excuse, though, for failing to try and determine whether causality exists. This policy-related research review was commissioned to see to what extent we can answer an apparently simple question:

- Do sporting success or sporting role models promote sports participation?

If such links could be determined, then a host of subsidiary questions would emerge: is the impact sustainable or just temporary; are new participants attracted or do existing sportspeople aspire to more; can we target particular groups; and, perhaps most important, how can we capitalise on sporting success or role models to achieve maximum effect on participation?

This review carefully considers a substantial body of research in the area including earlier reviews. Its response to the core question is: “No impacts have been robustly demonstrated.”

This is not, to use a Scots law analogy, a ‘guilty’ verdict against those who use sporting success or role models to promote participation. The verdict to date is rather one of ‘not proven’. Commonsense and intuitive approaches may indeed be right; but research approaches have not been sophisticated enough to tease out the complex proof of any causal links.

Nor does this just leave us at square one. Even without proof positive of links, there is enough experience (albeit based on commonsense or intuitive assumptions) out there to provide practical guidance. This review collates this experience and provides guidelines and policy implications based on good practice. These are listed on pp 35-37; for example:

- In programmes using sporting role models, the role models should not simply be ‘parachuted in’: there should be interaction between the model and the potential participant; repeated involvement is preferable; there should be opportunities for positive follow-up and reinforcement of the message conveyed; and those messages should be consistent both with the behaviour of the models elsewhere and in the reinforcement by others such as parents and teachers.

The policy-related research reviews commissioned by **sportscotland** are intended to combine rigorous assessments and syntheses of relevant research with practical implications to inform policy. This has been achieved admirably

by Professor Lyle and we welcome both the examples of good practice and the implications for policy makers that he raises.

In terms of the core question, for once the research commissioner echoes the researcher's eternal *crie de coeur*: more research needed!

Research Unit
sportscotland
January 2009

Summary

Claims for a link connecting sporting success, the hosting of major events or sporting role models with increased sports participation form part of the rhetoric of sports development policy and practice, although claims in recent documents are more muted.

Previous reviews have demonstrated no robust evidence of the impact of sporting success or sporting role models on sustained participation, and no evidence was unearthed in this review to refute this position.

Other than the more generally applicable social learning theory, no established model of behaviour change was identified that would lead to expectations of sports participation from non- or lesser-participating groups. It might be expected that a general improvement in infrastructure and resources when hosting events would provide a stimulus to existing participants.

The complexity of motivations to participate in sport or to be physically active and the interrelatedness of sports development processes render almost impossible the evaluation of single variable effects such as these. The difficulty in isolating the active effect of sporting success or sporting role models discourages rigorous impact studies.

Methodologies employed in role model research are characterised by case study approaches, observer surveys and process monitoring. The absence of control groups, the lack of consensus on concepts involved and the need for longer-term studies have prevented rigorous systematic research.

Sporting role models are important to young people and can be influential in their behaviour and values.

The level of interest engendered by programmes such as Sporting Champions is high, and they are generally very well received. Converting interest to activity is not yet substantiated.

Sporting success in specific sports or from hosting a major event may lead to a halo effect in the short term and a burst of interest in participation. Evidence from the Manchester 2002 Commonwealth Games found no evidence of an impact on participation, and evidence more generally suggests that any benefits will only accrue from a more integrated and better planned sports development strategy.

Role models can be categorised on a continuum from observation and minimal interaction to longer-term and more interactive mentoring relationships. Evidence suggests that mentoring-type programmes with 'at risk' groups are more likely to have an effect.

Changed behaviour is more likely when the role model presents a message in such a way that the observer's attention is stimulated, lasting images are

created, opportunities for reinforcement are available and there is perception of reward or added value.

It has been argued that all high-profile sportspersons have a role model function. This has been problematic in terms of the much-publicised instances of inappropriate behaviour by sports stars. There is evidence that young people have a realistic view of the behaviour expected from sporting celebrities.

Males and females differ in their identification with role models. This is exacerbated by the relative paucity of female media sports stars. Role models and sporting success may also exemplify achievement for special populations. This suggests that programmes and development initiatives should be targeted.

There is a confusion of terminology in the use of the terms sporting 'role model', 'hero', 'celebrity' and 'star'. This impacts on the instruments used in research. When combined with the multi-dimensional nature of role modelling, there is a need for a better understanding of how the model is perceived and used by young people.

Given the importance of relevance, attainability and similarity to the observer's self-concept, it may not always be appropriate to use elite sporting champions. Peer models have a role to play in demonstrating the attainability of sporting success.

It is questionable whether sporting success is likely to have a general effect on participation (since this fails to acknowledge the specificity of initiation and recruitment, and does not adhere to good principles of modelling), and partly explains the likelihood of greater impact on existing participants. Similarly, role model programmes are likely to use individuals who have succeeded in a particular sport. Although they may convey a generic message, the impact seems likely to be more sport specific.

An increase in participation as a direct result of sporting success and sporting role models is a secondary effect, but good practice can enhance the likelihood of an impact. Both sporting success and the availability of appropriate role models are essential elements in a high quality sporting environment: these will contribute, along with many other factors, to the perception of sport as an attractive, attainable and rewarding experience.

It is important that there is consistency in the messages received by young people. The likelihood of behaviour change may be very dependent on the level of reinforcement from parents and schools.

Elite models and sporting success convey an achievement-orientation based on relative success. This may conflict with other messages about personal development and mastery of sporting skills. Whatever the message, it is important that role model programmes involve adequate training to ensure a consistent and appropriate message.

Introduction

The aim of this study was to review critically those policy evaluations and research that are based on the theory that there is a positive link between sporting success or positive sporting role models and sports participation. The review was intended to allow any appropriate policy implications to be drawn.

More specifically, the brief for the review was to determine:

- where such links have been claimed, and the robustness of the claims;
- evidence of sustainability of any impacts that are robustly demonstrated;
- mechanisms and contexts that may achieve or maximise sustainable impacts;
- the profile of people who may be more influenced by such impacts; and
- policy implications that result.

Where such impacts could be demonstrated, there was a further set of objectives concerning the specificity of the impacts in sports development terms:

- attracting non-participants into sport generally;
- attracting new participants into a specific sport;
- increasing participation of existing participants; and
- increasing performance aspirations of existing participants.

Two factors impinged on the approach taken to the review:

- Firstly, there were available two extensive and recent literature and case study reviews on sporting role model programmes (MacCallum and Beltman, 2002; Payne, Reynolds, Brown and Fleming, 2003), and a paper examining the evidence for the impact of sporting success and major sports events (Coalter, 2004). These sources had established that there were few robust studies and little evidence to support the link between role models and sports participation:

It was immediately evident that there is very little academic or industry-based evidence to support the anecdotally proposed causal link between role models and sports participation. (Payne *et al*, 2003:i)

- Secondly, it became evident at an early stage that there was little additional evidence to bring to bear on this thesis.

It was assumed for the purposes of the review that there was a degree of similarity in the logic model, or theoretical basis, for the impact of both sporting success and role models on sports participation. The presumption that external sources of awareness and inspiration would act as a catalyst to participation seemed to apply to each process.

As a result of the above, the following approach was adopted:

- No further systematic review of impact or evaluation studies was carried out. This was occasioned by the evidence of the existing reviews. In addition, a very recent review of sporting interventions (Jackson *et al*, 2005) concluded that there were no controlled evaluation studies of sport interventions designed to increase participation. Jackson and colleagues identify policies to increase participation, specifically mentioning the use of role models (2005:3), but found that reports were generally case studies without baseline data and there was an absence of high-quality controlled evaluations.
- There was a search of electronic databases to find more recent evidence to counteract, or disprove, the existing and quite firm position established thus far, that there was no empirical evidence to support the causal link. The keywords 'role model', 'role modelling', 'sport', 'participation', 'effectiveness', 'impact', 'evidence' and 'theory' were used in the following databases: EBISCO, IngentaConnect, JSTOR, Science Direct, Illumina, Emerald, Cambridge Scientific Abstracts and ZETOC. A number of useful sources were identified to illuminate or support the major reviews and these are interwoven into the commentary. However, there were no substantive studies that directly evaluated programmes designed to impact on sports participation.
- Contacts within sports agencies were used to identify a number of reports that provided some evidence of programme implementation and evaluation, while not conforming to controlled studies. These are also identified within the commentary.
- The findings of the existing reviews (Payne *et al*, 2003; MacCallum and Beltman, 2002; Coalter, 2004) are presented in some detail.
- This is followed by a thematic approach to the issues identified. Drawing upon the literature to date, there is an emphasis on the conceptual analysis of the role model and sporting success constructs, and on the factors and arguments relevant to whether impact outcomes should be expected.
- There is also an emphasis on the policy implications from the evidence available and from the arguments presented.

In relation to the role model element of the review, the search for evidence focused on the impact of sporting role models. There is a wealth of evidence on the place of parents, teachers, coaches and peers in providing role models, but this (a) obscures the fact that there is little rigorous evaluation of the use of

'external' sporting role models, and (b) needs to be interpreted in the light of a better understanding of the categories of role model and role model programmes.

Review: Impact of Sports Role Models on Physical Activity

The literature review by Payne *et al* (2003) began from the premise that sports stars are held to be role models, particularly by young people, and that exposure to such persons can positively influence their behaviour. This assumption is shown to have been the basis for a number of programmes in which (usually) high-achieving sportspersons are promoted to the community in order to have a sports development impact.

Payne and colleagues conducted a rigorous and detailed search of the relevant literature. They also contacted 15 agencies that had conducted sport role model initiatives. Overall there was little evidence to reinforce the assumed causal link between role models and participation. Few of the programmes that they investigated had been rigorously evaluated. Their literature search “failed to identify any substantive articles that evaluated the effectiveness of sporting role model programmes in improving participation in sport” (2003: 15).

The case studies reviewed were characterised by process monitoring (for example, feedback on presentation by the role model) but only two of 15 had been rigorously evaluated. Interestingly, these were supported, longer-term programmes, in which role models were a very important but not the sole element, and reinforced the tendency (discussed later) for such programmes to be provided for ‘at risk’ young people. Nevertheless, the authors concluded that there was some evidence that the role model element had been an important part of these programmes.

Although the review was not able to point to any firm evidence, the authors were able to identify a number of relevant practical and theoretical issues. These are presented below, with accompanying comment¹:

The Role Model Continuum

The review used the work of MacCallum and Beltman (2002) to classify role model programmes as being on a continuum. There was some evidence that longer-term and supported/mentored exposure to role models was more beneficial than ‘single exposure events’.

- This typology of events is very valuable, both for delivery and evaluation. However, the impact of, for example, mentored programmes presents confounding issues. It may be difficult to isolate the role model effect from the quality and scale of the mentoring and the (not unexpected) influence of the more personalised relationship.

¹ Many of the issues that arise in this section are dealt with in greater detail in the body of the report.

Social Learning

Bandura's (1986) work on social learning theory is often adduced (see Lines, 2001) to support the notion that learners will change behaviour as a result of exposure to others.

However, learning or changes of behaviour do not always occur and it is necessary to examine some of the pre-conditions for social learning in order to evaluate the likelihood that role model programmes will be successful. Thus, the following criteria may be used to evaluate or structure programmes:

- **Attentional processes.** The extent to which the role model characteristics are attractive, the compatibility between learner and model, and the quality/stimulation of the presentation or event.
- **Retention processes.** The level of stimulation, creation of key images or messages.
- **Reproduction processes.** The degree to which opportunity for reinforcement is available, availability and quality of feedback to the learner.
- **Motivational processes.** Rewarding behaviour, incentives and perception of value added.

Self-efficacy

In relation to the 'content' of the role model's message, Bandura's self-efficacy theory (Bandura, 1977) is used to explain that the success of the message will be influenced by the individual's feelings of capability in relation to the likelihood of the desired outcome, and the value that the outcome represents.

Generic Role Modelling

The review points out that role modelling is a generic term and a universal activity. Parents, teachers, and co-workers as well as those achieving some celebrity status can be viewed as role models, and this makes it necessary to re-visit the notion of what it means to be a role model, and the degree of voluntary (and purposeful) adoption of the role.

Individual Characteristics

It is important that the characteristics of the role model and the observer are taken into account. The most obvious distinction is between male and female role models and male and female observers. Evidence was presented that males are more likely to identify with athletes, and females with members of their family.

- One related issue that had little mention in the review and elsewhere is the sport-specific nature of the role model and any subsequent participation.

Conclusions

Payne *et al* (2003) is a useful introduction to the issues, and valuable for its summary of the very limited extent of the evidence related to sporting role models and programmes. The positive statements in the summary about the potential for sporting role model programmes are based on very modest evidence.

Review: What Makes an Effective Role Model Programme?

This research review (MacCallum and Beltman, 2002) is a very wide-ranging examination of role model programmes. It provides an excellent background to role models, albeit it is not directed specifically to sporting models. Also, in adopting a very broad definition of a role model, ranging from someone who would be held to be worthy of imitation to the more intense and intimate one-to-one relationships, the review embraces mentoring programmes, and these form much of the evidence base. Nevertheless, the insights contribute to policy formulation and good practice.

A major contribution of the review is the categorisation of role model programmes into a continuum stretching from limited interaction between model and observer to extensive interaction. At the minimal end of the continuum, observation and passive demonstration form the delivery focus. Programmes pass through a stage in which there is feedback and 'scaffolding' (social support), to the extreme end in which there is personal support and intensive relationships. These different forms of role model programme are significant in policy making because the available evidence points to some effectiveness at the interactive (mentoring) end of the continuum.

Despite their audit of over 400 programmes, MacCallum and Beltman found relatively few studies of effectiveness, and these were mostly studies of 'at risk' mentoring. They point to the following problems of methodology: over-reliance on retrospective accounts, absence of control or comparison groups, ill-defined concepts, unrepresentative groups, and an absence of longitudinal studies. Interestingly, they are specific about the characteristics of 'celebrity' research, such as high profile sporting role models (2002: 40):

There are few reviews of role model programmes using celebrities. It is difficult to review research relating to celebrities and others perceived as role models as the question investigated is generally about who are the role models rather than what influence the role models have.

The theoretical basis for the influence of role models is that described earlier, the social learning model. The nature of the relationship between the learner and the model is emphasised and characterised by social distance, perceived similarity and the relevance of the role, skill or message to the learner. The immediacy of the impact is stressed. The authors (2002: 27) cite a 1985 paper by Sosniak who points to the initiation stage of a change of behaviour, at which time encouragement of interest, stimulation and immediacy of reward is important. This also has implications for the structure of programmes.

On the basis of their audit of programmes involving role models, MacCallum and Beltman were able to identify some common elements of effectiveness (2002: 3):

- administration/management of the programme sensitive to young people;

- flexibility;
- the development of networks;
- mechanisms for ongoing feedback from participants (young people, role models and other significant people) and evaluation for programme improvement; and
- sufficient resources for the programme to achieve its aims.

These common elements reflect the emphasis with mentoring programmes focused on 'at risk' young people. Although there were many fewer evaluations of programmes of the minimal interaction type, the key features of these centred on the model's personal characteristics (while accepting their celebrity or status position). The elements identified were (a) relevance and accessibility; (b) coping characteristics; (c) consistent messages; (d) provision for ongoing support; and (e) serial reinforcement of the message. Once again these features are useful benchmarks for existing programmes.

The features of effective role models were adapted from McInerney and McInerney (1998). These were: attractiveness, social power, status, competence, nurturing, interaction and similarity. It should be noted that these characteristics are variously appropriate in the context of a range of interpretations of what it means to be a role model.

The authors identify a number of implications for role model programmes in which there is limited or no interaction. Following on from their literature review, they suggest that (the implications are reproduced verbatim, 2002:37):

- a model must be attractive, important or relevant in some way to the young person;
- models need to find common ground or make their own circumstances or personal goals relevant in some way to those of the young people involved;
- for young people who doubt their own abilities or the value of a modelled behaviour, coping models who can demonstrate how success is achieved may be more effective than expert models;
- young people do pay attention to celebrities, but not necessarily to a greater extent in terms of learning or admiration than to others in their environment; and
- using successful same-sex adults or those from similar ethnic or other backgrounds may increase relevance but is not sufficient alone to change behaviour.

In the context of MacCallum and Beltman's overall findings, these implications or recommendations should be thought of as indicators of good practice, but not necessarily guaranteeing effective outcomes in terms of sports participation.

Review: A Sustainable Sporting Legacy

Coalter's (2004) paper examines the claims made for the sports development benefits of staging the 2012 Olympics in London. His analysis is wide-ranging and, relevant to the purposes of this review, focuses on the impact of major events and the inspirational or encouragement additionality of exposure to elite sporting success. Such exposure is treated as being of the same order as exposure to high-profile sporting role models. Again, comment is offered in relation to the author's analysis that point to issues to be discussed at a later stage.

Coalter concludes that there is a lack of rigorous impact studies, with no clear picture emerging from the literature (Cashman, 2003; Veal, 2003). Research on the effect of the 2002 Manchester Commonwealth Games (MORI, 2004) showed that there was "no measurable impact on immediate post-Games participation" (Coalter, 2004: 80). This general conclusion is supported by *Game Plan* (DCMS/Cabinet Office, 2002).

- Coalter distinguishes in his analysis between general sports participation and increases in participation through sports clubs and governing bodies. This is a distinction that requires further clarification and an awareness of recruitment avenues. Throughout the paper there is no distinction between young persons and others, and this would influence the recruitment mechanisms and likelihood of impact on participation. No matter what the concepts involved, the message is clear: there is no evidence of sustained participation as a result of major events.

The paper details the work of Hindson *et al* (1994). There was only modest evidence in this study for any 'trickle down effect' on sports participation of a period including major events.

- There needs to be further examination of the phenomenon of sports-specific impact. The presumption of a blanket effect from a multi-sport event (such as the Commonwealth Games or Olympic Games) is not supported by the evidence, but there is no obvious change model that would suggest that it might happen. The impact of success in a particular sport might be more supportable. The **sportscotland** report (2004) on the aftermath of an Olympic curling gold medal by a Scottish team showed some increase within the sport, and by those who were already committed to the sport.
- A further issue is the implied criticism of clubs that they had not 'made the most' of opportunities afforded by greater media presence for major events. This assumes that clubs are intent on attracting greater numbers of participants. Given the evidence (Allison, 2001) that the *raison d'être* of sports clubs is to cater to the needs of their existing membership and ensure the club's survival, this would depend on whether attracting increased membership meets these criteria. This is not an unreasonable assumption for many clubs, but it requires further consideration of the role and remit of facilitators and deliverers within sports provision.

Coalter goes on to examine the concept of excellence and success in sport as a role modelling effect. He reviews Payne *et al's* (2003) work and concludes that sporting excellence may not fit with best practice in providing accessible and relevant exemplars. He also notes the potential for inappropriate behaviour by sporting role models. He concludes: "fleeting images of sporting achievement may not be enough to ensure that such role models contribute to a substantial increase in sports participation" (2004: 102).

The paper contains advice on the good practice needed to ensure a beneficial legacy from major events. In relation to the potential impact of events, excellence role modelling and success, Coalter has little comfort:

Most of the evidence quoted here suggests that major events have no inevitably positive impacts on levels of sports participation. Further, many of the implicit assumptions about stimulating participation (sporting role models, 'trickle down effects', media coverage) are at best simplistic as single variable theories of behavioural change (2004: 105).

The Policy Context

A mutually beneficial relationship is assumed to exist between elite sport and mass participation. Achievement in sport at the highest levels is assumed to have a promotional effect and reinforces the perceptions of the rewards available. This 'top to bottom' relationship can be described as follows: elite sport will have a positive influence on general participation by providing an emotional representation, a reinforcement of the value of participation and a reminder of the reward environment; that is, an incentive to active participation. Thus the mechanisms are inspiration, incentive, representation and role modelling (Lyle, 2004). The impact of elite sport on sport for all may be one of the rationales for funding that stratum of sports provision.

International sporting success according the Minister's foreword to *Game Plan* "boosts the profile of a sport and increases interest in participation" (DCMS/Strategy Unit, 2002: 9). Later in that document, however, there is a clarification that "the interactions between participation, international competition and hosting events are unclear" (2002: 14). It goes on, "international success does not appear to stimulate **sustained** increases in participation" (2002: 14). The authors highlighted the paucity of data as preventing them from offering "robust and compelling conclusions" (2002: 72) in support of sporting success and major events as catalysts for increased participation.

Game Plan goes on to say:

Many sports report an upsurge in interest following international success, particularly when televised. Intuitively this makes sense and major sporting figures are often regarded as role models to inspire young people (2002: 72).

Although there appears to be little evidence for significant impact on participation, this rhetoric remains part of official language: "promoting excellence is neither elitist nor excluding – Scotland's athletes are excellent role models, particularly for the young" (**sportscotland**, 2003: 38). The aim of enhancing international success is partly defended by its catalytic effect: "As role models, high performance athletes contribute by encouraging people to play sport, and by boosting the aspirations of those already involved" (2003: 19).

The paper by Coalter (2004) pointed to the rhetoric within the claims for the beneficial legacy of successfully hosting the 2012 Olympic Games in London. The current programme 'Sporting Champions', in which sports stars and emerging stars visit schools, is a concrete manifestation of policy related to role modelling (these programmes are examined later in the report).

The DCMS Select Committee Report on Drugs and Role Models in Sport (Culture, Media and Sport Committee, 2004), although orientated to the drugs in sport issue, is valuable for its endorsement of role modelling. The Committee summarised the evidence presented to it as supporting the potential for role

models to influence behaviour, although emphasising the impact of both positive and negative models on existing participants. It was clear from the report that role model responsibilities were assumed to be one of the features of being a high-profile sports person. The generally optimistic tenor of this aspect of the report is reflected in the conclusion:

It is clear that the vast majority of sporting heroes – and the signals emanating from sport more generally – promote highly laudable examples and values in terms of elite sporting achievement, the general benefits of sporting participation and other personal development goals (2004: 50).

The Government response (DCMS, 2004) to the report supports this approach: “we... know that high profile sportsmen and women are influential role models, whose behaviour has a significant impact on young people as they aspire to emulate their sporting heroes” (2004: 11). The response highlights the contribution of UK Sport’s drug-free sport Ambassadors programme² in addition to the Sporting Champions programmes.

There is no doubt about the purposeful use of role models to influence behaviour. A keyword search on the Internet identified contexts such as nursing, parenting, savings plans, management, breastfeeding, third world development, computer modelling, armed forces recruitment, women scientists, and immigrants. A significant number of the references in relation to sporting role models were on the (often negative) behaviour of sports celebrities³.

There seems little doubt that the assumption of a link between high profile success or major events and the stimulation of participation is current; albeit the claims for sustained increases beyond the halo effect of immediate publicity, and the impact on those who are currently inactive, have been muted. On the other hand, there is strong evidence that sporting role models are assumed to influence young people and that this assumption is the basis for some sports development programmes.

² High profile sporting ambassadors help to promote a drug-free message at major sporting events for young people. See www.startclean.co.uk.

³ See www.geocities.com/Athens/Academy/5861/rolemod.htm for (slightly sensationalised) examples of poor role models in sport.

Sporting Success and Hosting Major Events

Evidence for a Sports Development Legacy

There is no doubt about the rhetoric applied to claims for a sports development impact from hosting major events (Brown and Massey, 2001; Masterman, 2003). The UK Sport report *Measuring Success 2: The Economic Impact of Major Sports Events* uses what it terms a 'balanced scorecard approach' to identify far-reaching benefits beyond economic impacts. Sports development is recognised as a potential benefit but given modest support:

...immediate benefit... might involve some form of sports development impact which could encourage more people to take up a sport... The long-term effect of any increase in participation could be tracked, although it may be difficult to prove causality⁴.

An example is given of the sports development initiatives involved in the staging of a world amateur boxing event in Belfast. This did not demonstrate that the event promoted participation per se, but illustrated how sports development could be built around an event and associated personalities.

Stewart and Nicholson (2004) looked at the impact of international sporting success on organised sporting participation in Australia. They placed their research in the context of what they identify as a 'taken-for-granted assumption' in sports development policy (Commonwealth of Australia, 2001). The authors examined a range of Olympic and non-Olympic team and individual sports, and plotted participation rates against international success over the 14 years from 1986 to 2000. They concluded that there was no clear correlation between elite sporting success and participation, and that rates of participation had remained constant.

Research quoted by Sport England⁵ into the impact of the Athens Olympic Games claims under the banner 'Medal winners inspire greater sporting participation and interest' that more than a quarter of the population have been inspired to play more sport or become more involved in sport in the near future. The evidence comes from a telephone survey about intentions and reported behaviour. However, the relevant results suggest that 11% of the public questioned are 'involved in more sport', without a clear indication of what that means. It is understandable that a positive bias should be placed on evidence but the results hardly seem to justify the headline: 'Athens success inspires one in four to take up sport'.

⁴ http://www.uk sport.gov.uk/pages/economic_impact_of_major_sports_events/ accessed 09.05.05

⁵ www.sportengland.org/news/press_releases/athens_success_inspires.htm (2004) accessed 20.04.05

There is no doubt that major international events have a positive effect in terms of 'passive inspiration'⁶. Survey research must take care to distinguish clearly between the different stages of readiness, willingness and actual levels of participation. In sports development terms it is also important to distinguish between participating, officiating, administration and spectating.

The Commonwealth Games household survey conducted for UK Sport (MORI, 2004) concluded that there was no evidence for a regional sports participation impact from the Manchester 2002 Commonwealth Games: "the Games appear to have had no impact on sport participation levels" (2004: 1). This was a pre-post household survey, measuring participation and other engagements in sport in a number of local authority areas in the North-West of England. There was no impact on participation, despite this being a low-participating region in relation to the national average.

- The profile of participants, in terms of age, gender, ethnicity and social class was largely unaffected, although the report is more optimistic about the potential for an impact on children. Interestingly, the survey found no significant change in the proportion of people who organised sport as volunteers.
- A considerable emphasis was placed on volunteering at the Manchester Commonwealth Games. Almost 10,000 people were involved during the Games and there were both pre-Games and post-Games initiatives to capitalise on the interest shown, and on the potential for personal development and subsequent enhancement of skills. However, in a report on the impact on volunteers who had taken part in a pre-Games survey, the International Centre for Research and Consultancy at Manchester Metropolitan University⁷, the researchers found "no significant changes in the type and extent of volunteers' participation in sport or in the type and extent of their voluntary work" (4.1).

A further study on the sports development impact of the 2002 Commonwealth Games (Brown *et al*, 2004), conducted for UK Sport, confirmed the absence of impact. The report notes the generally positive effect on many aspects of sports provision and on the practice of sports development (for example, in the use of the new facilities). However, the overall conclusion was that greater efforts could have been made by a range of agencies to maximise the potential impact.

Participation rates, in relation to Games-related initiatives, had not increased significantly since before the Games. The authors put this down to the absence of a targeted and specific-sports focus in legacy planning and a lack of capacity within sporting bodies to capitalise on the opportunities available. A caveat is

⁶ Loosely defined as a heightened awareness, feeling good, or reporting an increased predisposition to participate.

⁷ Paper made available by UK Sport.

placed on the quality of data received from sports organisations, but the conclusion nevertheless was that registered membership has not increased as a result of the Games.

An interesting issue to arise from these reports is the distinction between a regional and national effect on sport. Whereas a more local impact on 'general participation' might be expected from an event, success in individual sports and increased awareness might be expected to result in a national impact in those sports.⁸ Notwithstanding the lack of evidence of any impact on participation levels, the authors point to the danger of a solely regional effect unless agencies are able to mobilise a campaign approach to development at a national level.

Commentary on Sporting Success and Participation

The issue of causality is a challenging one to resolve for researchers in attempting to investigate the linkage between success in sport and encouragement to participation, particularly so when the resultant participation is influenced by purposeful 'third party' activity associated with the sport or event in question. In any case, there is very little rigorous evidence to demonstrate that a relationship exists.

There is no consensual theoretical position, or change model, in the literature that provides a rationale for increases in participation to take place. Each of the following may be relevant:

- Raising awareness and interest will 'move forward' the individual's readiness to participate through stages of commitment to the activity (see Prochaska and DiClemente, 1992).
- It can be assumed that sports participation is not intended to be affected merely by passive association. In other words, sports organisations will build sports development initiatives around success or event hosting. A reasonable argument is that such initiatives should have more chance of success by having a current, high profile or emotional 'hook' around which to build.
- Success in sport demonstrates the reward environment, that is, a role modelling effect. People are able to particularise the benefits, status and achievements accruing from participation.
- 'Trickle down' is too imprecise a term. Understanding potential increases in participation need to be couched in terms of the sports development processes being influenced positively. Recruitment mechanisms, club/other infrastructures, media interest, role models highlighted, increased funding,

⁸ This was exemplified by responses from governing bodies of sport in the survey quoted above on the impact of the Athens Olympics.

greater number of events in lead-up, and so on: there is a need to appreciate which, if any, of these elements are being influenced.

The rationale for change to take place will be based on one or a combination of individual, infrastructural or developmental factors. Although sporting success and major events may focus attention onto particular sports, any change will be in the context of existing initiatives and the prevailing policy and resource climate. These may be difficult to dissociate from the impact of particular successes.

The particular emphasis within this review is on the potential for increased sports participation. There is no doubt that there are many other benefits from sporting success, either internal to the sport (for example, reward environment, competition opportunities, funding, publicity) or external to the sport (for example, economic benefits, feel-good factor). The fact that there is very limited evidence of an immediate or even medium-term impact on participation should not detract from these other benefits. Furthermore, it seems likely that, in time, the other benefits will be aggregated into a sport context that is more likely to attract new participants. This problem of not accounting for longer-term benefits in evaluation studies has been pointed to as a methodological limitation (MacCallum and Beltman, 2002).

Although the rationales presented above are not compelling, these and the intuitive sense that there 'ought' to be an impact on participation, draws attention to why there is no impact demonstrated.

- The first important point is that there are methodological limitations to carrying out impact studies in this area. The quality of the data is often challenged (Brown *et al*, 2004); there are difficulties with longer-term outcomes and with identifying control or comparison groups. There are also conceptual or definitional issues associated with such studies. What constitutes a new participant? For how long should an individual be involved before being 'counted'?
- The awareness-raising stimulation associated with sporting success should not be overestimated. Success in traditional 'major sports' will receive most publicity but these sports, by definition, have already penetrated the potential participant base more than others. It seems likely that sporting success in more 'minor' sports may not be attracting the attention of the passive population. This may be a partial explanation for why such impact as there is will be felt most strongly within those already committed to the sport (**sportscotland**, 2004).
- The challenges to raising sports participation levels are well documented (DCMS/Cabinet Office, 2002). One argument might be that those already predisposed to participate are already active, or are constrained by factors that increased stimulation may not overcome. There is a regular turnover of participants (as the drop-out ratios confirm), but the numbers attracted to individual sports seem relatively stable. The message is that increasing

participation by any means is challenging, and the impact of sporting success will have to overcome a list of well-established constraining factors (Sallis *et al*, 2000).

- The review will demonstrate that success and role modelling are dependent for impact on the stimulation effect. As with role modelling, the success enjoyed by a sport has to have a relevance to the observer. This may be the case for those already connected to a sport, and may explain some likelihood of increased involvement. However, for those not already engaged, the spectacle of success may seem some distance from what they understand as their 'beginners role' within the sport. Observers may have to be given some credit for appreciating that their experiences will not be those of the elite participants that they celebrate.

Role Models

The Theoretical Underpinning

The social learning position (Bandura, 1986) adopted by writers in this area (see MacCallum and Beltman, 2002; Payne *et al*, 2003) needs some further clarification. The place of role models in the socialisation of young people is incontrovertible, and the debate usually centres on the relative contribution of parents, peers and teachers. The earlier reviews have established that young people identify with sporting heroes and that these figures are likely to be influential (British Psychological Society, 2004). Although social learning makes sense in the context of 'passive' role modelling (in which the model plays no active role in communicating with the observer) and in promotional use of sporting role models, the key issue is in which contexts and as a result of exposure to which models is behaviour change likely? Role models provide examples of behaviour and values, and reinforce or sanction behaviour and values. Nevertheless, sporting participation seems not to be susceptible to the message conveyed by role models, or their inspirational effect, other than in the context of reinforcement from parents and peers, and as a result of active involvement and opportunity.

There are clear messages for the most appropriate characteristics of role models (attractiveness, relevance, practical realism and so on). However, the theoretical position also has implications for the consistency of the message and the perceived opportunity to convert interest to action.

Perhaps the most important point to be grasped is that a change of behaviour is required. Young people are all exposed to role models and the great majority can identify with sporting heroes. However, the impact of heightened awareness in promotional programmes is not impacting on a 'blank slate'. Therefore, the motivation to change has to be weighed against existing behaviour. Policy makers may need to consider whether the messages received by non- and lesser-participating individuals should be different from those to existing participants.

In evidence submitted by the British Psychological Society (2004) to the Culture Media and Sport Committee on drug use in sport, the Society highlighted the need for consistent messages:

role models presenting personal, positive, consistent messages which draw a distinction between appropriate and inappropriate strategies for success are more likely to bring about behavioural change than threats and fear-arousing messages (2004: 1).

The conclusion to be drawn from Payne *et al* (2003) and MacCallum and Beltman (2002) is that there is no strong evidence to support the use or effect of role models in isolation. Lines (2001) concurs: "a lack of sustained research has failed to confirm the actual impact of sports stars as role models for young people" (2001: 285). Her paper questions what she terms the 'naturalised rhetoric' about the influence of sporting role models.

Lines (2002) reports in detail the reaction of 15 year-olds to sports media stars. The findings confirmed the marginalisation of women in sporting narratives, and identified a hero-villain distinction in levels of inspiration. Lines suggests “it is too simplistic an assumption that young people will adopt the most highly profile stars and imitate on and off field behaviour” (2002: 197). She stresses the audience’s interpretation of what is presented. She found that young people could categorise stars’ behaviour as admirable, heroic or trivialised. The hero was a combination of excellence, dominance, determination, hard work, coping with pressure and mystique. Heroes went beyond celebrity; they showed social mobility, good work ethic and moral behaviour.

It is important that young people were able to be discriminating about the behaviour of sports stars. They were realistic, but acknowledged the inspirational role. Sporting role models were adopted by ‘those who want to be athletes’. The general finding is that young people are not gullible: “young people are not passive and readily enslaved, but capable of making lucid and critical judgements of the images they receive” (2002: 212). In an interesting study using under-12s, MacDougall *et al* (2004) found mixed responses from the children on the power of sporting heroes as role models.

The point is made later that role models may be sought to exemplify the requirements of a particular role. This may be most likely in an occupational hierarchy (Althouse *et al*, 1999), but could be analogous to the young athlete coming to realise what is demanded of the elite athlete role. Alternatively, good peer role models (decreasing the ‘distance’ from the observer) might be more appropriate for that purpose.

The Role Model Concept

The literature frequently offers a definition of a role model but the concept is generally treated as a one-dimensional one and survey instruments reflect neither a consistency of approach (what you get depends on the question you ask) nor a link between expectations and interventions. It is too simplistic (albeit fairly accurate) to say that a role model is someone ‘whom you would deem worthy to emulate’. A typical charge might be that the terms ‘sporting role model’, ‘sporting hero’, ‘sports star’, ‘sporting celebrity’, and ‘high-profile sportsperson’ are used interchangeably (a charge to which this review is not immune). The following statements are intended to illustrate how research and delivery in sporting role model programmes should take into account these distinctions, and at the very least establish a position at the outset.

A ‘sporting hero’ is a person whom one admires. The hero is defined by a visible personification of certain traits. For example, they may be interpreted by the observer (and/or portrayed by the media) to demonstrate perseverance, to be self-effacing and modest, with social responsibility. The hero may have succeeded ‘against the odds’. Most of the time, the hero will display mastery in her/his sport, but can achieve at a range of local and national levels. A ‘sporting celebrity’ will be defined by the level of recognition, visibility and media attention, but may or may not be viewed as having hero-like qualities. These

constructs can of course apply to the same person. The term 'sports star' is rather less well defined and is perhaps best thought of as a reflection of media attention⁹.

A further issue is the directional nature of the modelling. Is the role model defined by the observer's attention and identification, or by the model's purposeful assumption of the role? This distinction is simple enough to comprehend but needs to be borne in mind when considering the issue of active and passive modelling. To say that all high-profile athletes are role models and that this cannot be disregarded by the athlete is to have recourse to a 'passive' interpretation. It is this interpretation that can be problematical in the context of inappropriate behaviour by sporting stars. Of course, to aver that athletes have a responsibility to exhibit 'good behaviour', to be a positive role model, is to suggest an 'active' role.

Sporting role model programmes make use of sporting champions in an active role. On the other hand, the behaviour of all athletes, physical education teachers, peer athletes and parents are likely to fluctuate between active and passive. One of the tasks for policy makers is to ensure that the messages conveyed are consistent.

The most important aspect of role modelling is which part of the role is being portrayed or, rather, assimilated by the observer. It is this range of role constructs that helps to explain how the role model will impact on the observer's behaviour. The behaviour and values exhibited by a role model can be one or more of the following:

- **An exemplary manifestation of the role.** The model is acknowledged for carrying out the role in accordance with all measures of good practice. This reinforces good practice (including good values) for those who are already engaged. This may be important in a vocational or training role.
- **A representation of sanctioned behaviour.** The behaviour of the model (good or bad) may be held to be 'okay to copy'. It is this aspect of modelling by sports stars that can be problematical.
- **An inspirational example of personal achievement.** The model demonstrates a 'road to the top', despite challenging personal circumstances. This message may allow others to realise that 'it can be done'.
- **An illustration of the reward environment.** The achievements of the model are a reminder that high status, satisfaction and some benefits can follow if you are successful in (that) sport.

⁹ It is tempting here to insert a criterion of recognising achievement. However, even those who achieve the highest honours and attainments in a minor sport but are accorded little public recognition may not be referred to as sports stars.

- **A demonstration of achievement for special populations.** The model is an illustration that gender, ethnicity or disability (or other special status) is not a barrier to achievement.
- **An exemplar of ‘what to do’ in a role.** The model provides an account of what being in that role entails. This may be most helpful for those who have already had some experience.
- **A figure with whom to identify.** This is closest to the hero/celebrity experience. The model has an attraction and personal meaning for the observer. Although there may be some superficial copying, the desire to emulate is a ‘distant’ one.

Each of these facets of role modelling may act independently or in concert. Perhaps the most important issue is that role model programmes need to establish and take into account the observer’s perspective. This will have implications for selection of the model, and delivery and structure of the programme. In evaluation methodology, the questions asked about the effect of a role model will be reflective of one or more of these elements.

The Medium and the Message

One of the issues for role model programmes is the nature of the message being conveyed. A study by Carr and Weigand (2001) compared the goal orientations of children with the perceived motivational climate emphasised by parents, peers, teachers and sporting heroes. Task orientation (emphasis on personal achievement and competence) was related to a mastery orientation in sporting heroes and ego orientation (demonstrating superior ability) to that same quality in their sporting heroes. This study examined the children’s orientation to physical education, but had previously been demonstrated in sport (Carr *et al*, 2000). The authors emphasise the fact that a causal link has not been established. However, they point to a form of parasocialisation through exposure to media sporting heroes and a subsequent interpretation of their heroes’ achievement motivations as a contributory factor.

Although the causal link has not been established, there are good practice implications. The authors feel it unlikely that the media representation of elite level sport can be other than ego-orientated, but role model programmes and promotional materials could emphasise mastery, application and personal attainment. This message may be more appropriate to those not already predisposed to sports participation.

Vescio *et al* (2004) cite a range of sources to support a view that the influence of role models is strongly affected by similarity between observer and model. They look to Bandura’s (1986) social-cognitive theory to emphasise that modelling is a powerful mechanism for the socialisation process. Importantly, modelling is not passive from the observer’s point of view; the observer brings to the interpretation of the model’s behaviours and values an accumulated set of socially-reinforced values. Vescio and her colleagues review the case for a

'gendered heroism' in the media, resulting in fewer female sports stars becoming prominent and being recognised for hero/heroine-like qualities. Their study extended the work of Biskup and Pfister (1999) in demonstrating that males and females differ in choosing and identifying with role models. Vescio *et al* found that boys chose male role models and girls chose female models. However, when focusing solely on sporting heroes, the percentage of girls who chose a male figure increased. From a programme perspective, this may suggest that male role models can be meaningful to girls, but this may also perpetuate the gender-biased approach to sporting heroes.

There is a tendency to focus on young people and sports participation, but this tends to hide the gender, ethnic and other differences in the population. The same issues exist for older persons and other less-participating groups. In particular, the 'exemplification' function of role models may serve to broaden awareness of the achievements and capabilities of, for example, disabled athletes (see Berger, 2004).

The exemplification function of the role model may be appropriate for minority sporting populations. For example, Nolubabalo Ndzundzu is held up as a 'unique role model' for her community because she represents South Africa's only black full-time professional woman cricketer¹⁰. A report prepared for the BME Sports Network East (2005) found that respondents stressed the need for young people to have role models from their community:

whilst there are many black faces visible as performers in football, cricket and athletics, there are very few in other sports or as managers, PE teachers, leisure centre managers, or local authority chief leisure officers (2005:5).

Of those surveyed in the 1999/2000 national survey on sport and ethnicity, 36% of those surveyed believe that they would be more physically active if they had more positive role models (Rowe and Champion, 2000).

Further examples of special population programmes are those under the aegis of the Aboriginal Sport Circle and organised by the Manitoba Aboriginal Sport and Recreation Council¹¹ in which role models are selected and publicised on a monthly basis as part of a promotional campaign. The Aboriginal Role Model Programme is a collaboration between the Aboriginal Sport Circle and the ESTEEM Team¹².

¹⁰ news.bbc.co.uk/sport1/hi/cricket/3445021.stm accessed 04.02.2005

¹¹ www.masrc.com/awards.html accessed 06.05.2005

¹² The ESTEEM Team is a national not-for-profit agency in Canada, which aims to inspire and educate young people. Its extensive role model programme provides interactive presentations by Olympic, Paralympic and world-class athletes to young people in schools, community centres and sports clubs. The Team delivers more than 3,000 school presentations each year reaching more than half a million young people (www.esteemteam.com accessed 01.06.2005). This organisation provides a resource, particularly a website, with which to interact with young people. There are lessons to be learned here for the expansion of role model programmes by Sport England and **sportscotland**.

The use of role models in women's sport is given prominence because of the relative paucity of media coverage in comparison to men's sport (Women's Sports Foundation (WSF), 2003a) and the greater drop-out from participation as girls move into their later teens and young adulthood. In addition, a body of research (for example, Biskup and Pfister 1999; Lines, 2001; Vescio *et al*, 2004) has established that boys and girls differ in their identification with sporting heroes.

The provision of appropriate women's role models is acknowledged as an important motivating factor in sports policy (WSF, 2003b; Barbano, 2000; Women in Sports website¹³) but there is no evidence to confirm or disprove any more or less effective impact of role models than for males or for sporting role modelling in general. A report prepared for the Women's Sports Foundation (Syzygy Leisure/WSF, 2004) confirmed that role models were important for girls but reinforced the need to provide relevant figures: "they were not always attracted by the household names perceiving them as too far removed from their daily lives" (2004: 4.38.2).

West *et al* (2001) suggest that role models are important because they 'demarcate' the role for others. They argue that this is important in sport because male coaches have marked the territory of coaching as a male domain. In another example, Nixon and Robinson (1999) showed that women's performance in education could be influenced by the presence of female staff role models.

Erde (1997), while arguing for specific training in ethical behaviour, distinguishes between mere role-execution (in which the individual does not think about serving as a model) and 'active articulation'. He argues that what he terms silent models are not valuable because of the lack of reinforcement and personalisation of the role for the observer. He does, however, argue for 'mobility prototypes' – those who demonstrate that it 'can be done'.

Individual Characteristics: Positive and Negative

The almost universal acceptance that all celebrities or high-profile sporting stars are role models has highlighted the issue of celebrity behaviour. The language of sporting role model programmes speaks of the positive role model, but Lines (2001) points to "growing media intrusion (signifying) the contemporary sports star as a damaged hero" (2001: 285). She points to the problematic worthiness of sporting role models in the light of their often negative behaviour on a continuum from hero to villain. She itemises instances of violence, promiscuity and poor sporting ethics¹⁴.

Examples of perceived poor role modelling abound, and these are couched in terms of the responsibilities that accrue to high-profile sportspersons. There is

¹³ www.makeithappen.com/wis/

¹⁴ See also www.geocities.com/Athens/Academy/5861/rolemod.htm

a general acceptance that such sportspersons should portray worthwhile behaviour. UK Sport identifies the 'rights and responsibilities of the athlete':

athletes can be influential role models for young people competing in sport. The behaviour of high performance athletes can have a significant impact on young people as they admire and aspire to emulate their sporting heroes, especially their actions and attitudes. High profile athletes should remember that they are regularly in the media and their actions can and do influence young people¹⁵.

There is considerable debate about whether the responsibility of role modelling has to be assumed by high profile stars (Sherman and Schookman, 2004). Intuitively this seems to be less of an issue for those from minority sports and for 'emerging' stars, than for celebrities from media-dominated professional sports (Wellman, 2003). The notion of 'distance and relevance' is called into question by the evidence of Melnick and Jackson (2002) who demonstrated that there was a globalisation (Americanisation) of sporting hero figures.

Although this review is focused on the impact of sporting role models on participation, there is a good deal of concern for the behaviour or example set by physical education teachers, who themselves are likely to be role models (Capel, 1997). This is not given any substantive treatment in the review, but it is worth pointing to the need for consistent messages about sports participation and the value, in role model programmes, of reinforcement and follow-up opportunities. Physical education teachers may also be in a position to counteract the negative values displayed by some sporting stars (see Cardinal and Cardinal, 2002).

In an interesting article, Moorman (2003) analysed the views of sailing instructors on the impact of sailing celebrities Ellen Macarthur and Shirley Robertson. The instructors had no doubts that the exploits of these stars had stimulated people's interest in sailing as a sport and that the visibility of the sport was important. However, their views were that they would have a greater influence on regular participants, and that Shirley Robertson's impact would be the greater because it presented a more "affordable and accessible" image (2003: 205). The instructors felt that they (instructors) were role models for first-time participants.

Research on the characteristics of those identified as role models by medical students found that the successful role models had a very interactive approach to teaching and to relationships with the students (Althouse et al, 1999). The self-esteem of the observer has also been investigated in relation to role models. Wohlford et al (2004) found that there was a relationship between the perceived similarity of college students to their role models and self-esteem scores. A greater difference equated to lower self-esteem scores. This may be another factor in creating 'distance' between elite models and observers for those with a low sporting self-esteem.

¹⁵ www.uksport.gov.uk/generic_template.asp?id=12221 accessed 09.05.2005

Role Model Programmes

Previous reviews have confirmed that there have been no rigorous evaluations of role model programmes, and have pointed to the difficulties of conducting such studies. Nevertheless, there have been evaluations of sporting role model-related programmes. These are characterised by recourse to the satisfaction of recipients and with intention to change, rather than measured change in attitudes or behaviour.

Sporting Champions was established in 2002 and is an archetypical role model programme in which sporting stars visit schools. The visits take a number of forms including coaching and demonstrating, speaking at assemblies, and interacting with pupils and teachers. The programme is organised in England by Sport England and has recruited almost 400 champions from 60 sports, who have made 360 visits to schools, reaching 120,000 children¹⁶. A similar programme is organised by **sportscotland**, through which 31 champions had made 124 visits to schools in Scotland by July 2005.

The Sporting Champions programme was evaluated in England between September 2001 and March 2003¹⁷. There were two elements to an impact analysis: questionnaires were distributed to a sample of schools to assess the immediate post-visit reaction (14 schools and 445 pupils responded), and questionnaires were distributed to a sample of schools to conduct a retrospective account, not less than three months after a visit (28 schools and 916 pupils). Headline figures from the initial survey indicated that 35% of pupils said that they have taken up a new sport since the visit, and 44% have started to play sport more often. Positive responses were indicated in pupils who expressed reservations about taking part in sport. In the retrospective study, 86% remembered the visit (although detail was sketchy), and 35% say that they had taken up a new sport.

Questionnaires were also distributed to participants in the Scottish implementation of the programme¹⁸. Most children (88%) reported that they already participated in sport outside school lessons. As a result of a visit, 42% reported that they wanted to try to become a champion, 27% wanted to take part more often and 19% wanted to try a new sport.

Sporting Champions is an important initiative in the context of this review. It embraces much of the good practice referred to in relation to model programmes, including interaction with children and training for champions. The evaluations carried out on the programmes leave no doubt that they are very well received by the schools and the pupils involved. The statements

¹⁶ Data collated from Culture Media and Sport Committee (2004)

¹⁷ Internal document obtained from Sport England.

¹⁸ Internal document obtained from **sportscotland**. Data were obtained from a sample of 214 children.

made by children in the evaluations illustrate the sort of reaction that the programmes would hope to engender. Notwithstanding these responses, the impact evaluations fall short of confirming the behavioural changes that have or have not taken place, and do not have the sophistication to approach a cause and effect study. There are no baseline data using rigorous instruments on pupils' attitudes and, perhaps most importantly, there is no comparison to a control group. There is no evidence on the scale or extent of the impact on individual pupils.

It is important not to criticise the evaluations for what they did not set out to do. However, it is disappointing that the apparent successes of the programme have not been evaluated within a more rigorous, and perhaps far reaching, methodology. Consideration should be given to targeting the programmes, and establishing more specifically the impact of such programmes on non- and less-participating groups.

A programme sponsored by the Scottish Professional Footballers Association was designed to have well-known professional footballers visit schools to conduct a soccer-related fitness and health programme. The response of the children and the teachers was entirely positive and there was no doubt that the presence of high-profile soccer stars was an important part of the programme. The six-week pilot programme had been evaluated by pupil and teacher questionnaires. An extremely high percentage of young people indicated that they now intended to be more active. The programme was not simply about role models, and with its one-to-one coaching and support materials is more reflective of the mentoring programmes advocated by MacCallum and Beltman (2002). Nevertheless, there is no doubt that the sporting stars were essential to the programme: "the children loved having... players working with them and seemed to listen to the important health messages they had to say more than they would have listened had it just come from their teacher"¹⁹.

A survey reported in the *Scotsman* newspaper (31 May 2005)²⁰ found that a majority of children would emulate professional footballers in committing a foul if it saved a goal being scored. Taken with the evidence of the programme above, this points to the need for consistency in the messages conveyed by high-profile sporting stars' behaviours.

¹⁹ Internal paper (dated April 2003) by the SPFA provided by **sportscotland**.

²⁰ 'Footballers set a foul example for children.' *Scotsman*, 31 May 2005.
thescotsman.scotsman.com/

Conclusions

The review set out with the objective of carrying out a critical appraisal of the literature and policy manifestations based on the assumption of a positive link between sporting success or sporting role models and sports participations. The evidence of existing substantive reviews was that there was little or no evidence to support this direct link. The review, therefore, adopted the approach of seeking more recent confirmation or refutation of this position, and of examining in some detail the issues involved. The review was unable to identify any research that would establish the link. The most recent evidence on sporting success from the Manchester 2002 Commonwealth Games determined that there was no impact on sports participation. Research on role model programmes follows a pattern of surveys of reported behaviour and, despite the obvious immediacy of effect on the young persons involved, the limitations of the research preclude any firm conclusions on sustained participation.

A significant factor for researchers and policy makers (and a confounding issue for the review) is that, despite the absence of evidence of a direct link to increases in sports participation, there are many acknowledged benefits from sporting success, hosting major events and conducting role model programmes. The evidence from this review suggests the following:

- An increase in participation as a direct result of sporting success and sporting role models is a secondary effect, but good practice can enhance the likelihood of an impact.
- Both sporting success and the availability of appropriate role models are essential elements in a high quality sporting environment: these will contribute, along with many other factors, to the perception of sport as an attractive, attainable and rewarding experience.

The complexity of motivations to participate in sport or to be physically active, and the interrelatedness of sports development processes, render almost impossible the evaluation of single variable effects such as these. Policy makers have a responsibility to identify more clearly the change behaviour models on which their programmes and policies for increasing sports participation are based. It is likely that these will argue for a central place for role models and the use of elite sporting success as inspirational effects, without expecting to demonstrate direct causal outcomes.

Throughout the literature and policy documentation there is an absence of recourse to theoretical arguments or change behaviour models to support practice. While the social learning theory has a universal application, and provides a rationale for learning from the behaviour of significant others, the subtleties of the application of the theory in terms of attention, retention, reinforcement and motivation need to be embedded into sports development schemes and role model programmes. It is likely that a greater degree of targeting would assist the likelihood of impact.

The failure to recognise role modelling as a multi-dimensional construct is a significant failing in understanding the level of impact to be obtained from elite sporting success or sporting role models (see the section 'The Role Model Concept' above). Role models, heroes and celebrities, local and national figures, elite and peer figures can each contribute differently to the observer's perception of these significant others as aspirational escapement figures, reference points or exemplars of practice. Policy makers need to consider how these differences can be better matched with the characteristics of the young people involved, the model's characteristics and the nature of the interaction.

Particularly in relation to the promotional effects of elite success or major events, policy makers must ensure that policy and practice are built around a sound understanding of recruitment practices into sport, of early patterns of engagement, and the effect of different entry points (school-related, club-based, local authorities and combinations thereof). Sporting success and role model programmes should be targeted at specific elements of the sports development process. Although it is apparently obvious, it bears repeating that the provision of opportunities and support (scaffolding) in order to help convert interest into activity is paramount.

Good Practice

Good practice has been identified throughout the review. The following are emphasised:

- Compatibility between the role model and the observer is vital and the responsibility of role model programmes.
- The attractiveness of the role model is very important. This may include age, gender, and presentational issues. Relevance and accessibility are important.
- The stimulation created in the delivery by the model or the recognition of success is essential, and has to lead to lasting images.
- Role model programmes should lead to interaction between the model and observer. A serial involvement would be preferable.
- There must be opportunities for positive follow up and reinforcement of the messages conveyed.
- It is vital that there is consistency in the message being conveyed, in the behaviour by models observed elsewhere, and in the reinforcement by others (parents, teachers, peers).
- There should be agreement on the message being conveyed. If, for example, personal development and fulfilment is the message, the models must be trained to present a mastery approach to sport.

- Different messages should be conveyed to non- and lesser-participating populations than to those already committed to sport.
- Sports development plans should acknowledge the specific contribution of major events or increased interest.
- Peer role models provide a necessary bridge between the unattainable elite model and the coping steps needed to progress.

Implications for the Objectives of the Review

The claims for the links between sporting success or positive role models and sports participation form part of the rhetoric of policy documentation in sport and are acknowledged as taken-for-granted assumptions about sports development policy and practice, and about claims for the impact of major events. However, academic writing acknowledges these as largely unsubstantiated claims:

- No impacts have been robustly demonstrated.

There are examples of good practice. However:

- Sporting successes have not been woven sufficiently into sports development. This may partly be a function of capacity and resources.
- Role model programmes fulfil a significant range of functions. The aggregation of observer perspectives, role model presentation and characteristics, and the requirements for significant and sustained changes of behaviour do not, in combination, lead to high expectations for any sustained impact on participation.
- Mentored and longer-lasting programmes have a greater likelihood of success.

Sports participation is differentiated by age, gender, ethnicity, disability and social class, and a range of opportunity factors. There is no evidence that sporting success or role models have impacted on this pattern. Insofar as sporting success and role models have a stimulation effect, this will be most effective on those who are already committed to sport and for whom the relevance and aspirations are more meaningful.

Implications for Policy Makers

The policy and practice leading to sporting success should be maintained. There are many acknowledged benefits. The success of a sport leads to a more positive sporting environment in which opportunities and rewards are evident. Although the causal link to participation is not direct, sporting success plays a vital part in stimulating interest, and provides a mechanism for sports promotion.

Sports development initiatives should be tied specifically to sporting successes and clear distinction made between more general and sport-specific initiatives. A primary responsibility is to ensure that the capacity and resources exist to reinforce participation recruitment and enhancement initiatives.

Role model programmes should ensure that there is a match between the model's characteristics, presentation, and message, with the perceptions of the audience. There are many different potential effects of a role model: these need to be established and more targeted programmes designed as a result.

There is evidence of stimulation and interest in young people as a result of visits from sporting champions. This needs to be integrated with other development opportunities. Where possible, the programmes should be for an extended period and involve mentoring or scaffolding.

The element of sport specificity is absent from much of the literature. It is questionable whether sporting success is likely to have a general effect on participation (since this fails to acknowledge the specificity of initiation and recruitment, and does not adhere to good principles of modelling), and partly explains the likelihood of impact on existing participants. Similarly, role model programmes are likely to use individuals who have succeeded in a particular sport. Although they may convey a generic message, the impact seems likely to be more sport specific. There is a need for research in this area.

Policy makers should examine the ESTEEM Team programme in Canada and the range of role model related avenues for raising the profile of sport. Furthermore, policy makers should consider the role model programme as an educational tool and give consideration to how the personal development message is transmitted by sporting stars. The evaluation would emphasise this aspect of the programme, with increased participation a secondary effect.

There are significant challenges for researchers in carrying out impact evaluations. Nevertheless, policy makers need to encourage rigorous evaluations of programmes and more general research into role modelling issues and effects.

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