

**Institution: Sheffield Hallam University**

**Unit of Assessment: 26 Sport and Exercise Sciences, Leisure and Tourism**

**a. Context**

Research in the UoA is located in four research centres, Centre for Sport and Exercise Sciences (CSES), Centre for Sport Engineering Research (CSER), Sport Industry Research Centre (SIRC), and the Tourism, Hospitality and Events Special Interest Group (THESIG). They have specific subject specialisms with a variety of non-academic **beneficiaries**, including clinical populations; sedentary populations; health practitioners; elite sport officials, coaches and athletes; the commercial sports equipment industry; national and international governing bodies of sport; public sports facility providers and users; major event hosting agencies; public engagement audiences; and international and national tourism policy agencies.

The UoA secured around 170 168 research projects worth £5.8m in the REF period 2008-14 (plus knowledge transfer income, including consultancy, of £6m). This is evidence not only of the efficacy with which such work is secured, but also, indirectly, of the extensive impact that has been achieved by these projects: most of the clients for these projects do not just want research results, they want to do something with them.

The **main types of impact** generated for beneficiaries are: improvements in the health of patients; improvements in the health of sedentary populations in deprived areas; new practices by health practitioners; new systems for coaches in boxing, taekwondo, swimming and diving, and improved performance for Team GB prior to London 2012 and Rio 2016; better research practices for Prince and adidas; improved policy and practice by the International Tennis Federation; improved mental toughness for elite referees in football and improved confidence for elite athletes in volleyball and golf; improved funding for elite sport coaching in UK; enhanced performance management practices by local sports facility managers; more reliable information on the impacts of major sports events; better public information on sports sciences; and evidence-informed tourism policy by international NGOs.

The **research underpinning** these respective impacts relates to REF outputs by Breckon (2-4), Copeland (1, 3, 4), Carter (1-3), Crank (1-3), Hopkins (4), Klonizakis (1, 2, 4) and Tew (1-4) for health impacts; Allen (1) Choppin (1), Goodwill (1-4) and Haake (2,3) for elite performance systems and governing bodies impacts; Maynard (2, 4) and Butt (1, 3, 4) for improved mental toughness and confidence at the elite level; Shibli (2) for improved governing body funding of elite sport; Kung (1, 2), Ramchandani (3), Shibli (3) and Taylor (4) for public facilities performance management impacts; Coleman (1-4), Davies (2, 3), Ramchandani (1) and Shibli (1) for major sports events impacts; and Meyer (1-4) for tourism policy impacts.

**b. Approach to impact**

UoA staff engage with non-academic users on a regular basis because much of the activity is client commissioned. Key users are in public, commercial and third sector, organisations and include national research agencies, government-funded sport agencies, national and international governing bodies of sport, and commercial sports equipment companies. Impact is central to contract research in that typically, project clients seek positive impacts from such research, either for their own objectives and processes or for customers. Interacting with non-academic beneficiaries is therefore built into the contract research process.

Relationships with actual and potential clients are a key factor in securing research contracts and in agreeing impact objectives for each project. Often the initial relationship building is from a zero base, such as when contact is triggered by reaction to invitations to tender, or when stimulated by national and international conferences (e.g. International Sports Engineering Association, International Society of Biomechanics), public engagement activities (e.g. RCUK lectures), blogs (e.g. [engineering sport.co.uk](http://engineering sport.co.uk)), or via the University's website ([www.shu.ac.uk/research](http://www.shu.ac.uk/research)). However, projects and impacts are also stimulated by proactive email or telephone contacts with existing or previous clients, to explore research ideas and likely impacts.

The concept of 'rich partnerships' is an important one for relationships with non-academic beneficiaries, particularly contract clients. This often emerges as a result of 'repeat business' with key organisations, secured through the quality of our research and the impacts it achieves.

**Impact template (REF3a)**

Examples include local NHS providers (Crank and CSES colleagues), UK Sport (Haake and CSER colleagues; Shibli and SIRC colleagues), Sport England (Shibli, Taylor and SIRC colleagues) and the Youth Sport Trust (Taylor and SIRC colleagues). With most organisations, the development of rich partnerships evolves through successful projects and the building of trust in the delivery of required outputs and impacts, processes which can culminate in an informal 'preferred bidder' status.

An example of a rich partnership is SIRC's relationship with Sport England, for whom SIRC has delivered many bespoke evaluations and services, including evaluations of Sport Unlimited (2008-11), School Games (20011-15), and the National Benchmarking Service (2000-13). The last of these illustrates the evolution from a research project to a consultancy service, to macro level research and dissemination, all of which impact on best practice in a sector. It began with a research contract in 1999 to identify performance indicators and utilise primary and secondary research to populate the indicators and calculate national benchmarks. Sport England used the research evidence as the basis for the National Benchmarking Service (NBS) and SIRC has since been the technical contractors. This provided SIRC with an extensive database from which to conduct secondary analysis, producing academic outputs (Kung 1 and 2, Ramchandani 3, Shibli 3 and Taylor 4) which has enhanced the impact of the NBS for Sport England and NBS clients. Annual conferences, including presentations by SIRC staff, facilitate the dissemination of research evidence and help to extend the impact on performance management in the sector. In 2013 Sport England implemented a Research and Evaluation Framework Agreement to identify approved bidders for its contracts. SIRC has been accepted as part of this for two out of the 12 areas of research - statistical analysis and modelling; and mixed methods data collection and analysis.

Impact is an important consideration in most of the contracts awarded to the research centres in the UoA. The potential for impact from a project's results is identified at the inception stage. Impact is typically explicit in project objectives and in the plans for disseminating project results. Clients are normally keen to receive recommendations on actions to take as a result of the project's findings, this being a key component in generating impact. Although most research reports are confidential, clients sometimes publish results as part of their dissemination strategy. For example, out of 220 SIRC project reports in the REF period, 38 (17%) were published by the clients. At the dissemination planning stage our ideas for academic outputs are discussed with clients, as a contribution to dissemination and impact. The UoA's staff are often involved in the active dissemination of research results to key stakeholders, in seminars, at conferences, and so on, thus helping to increase the impact of research.

Institutional support for the creation of impact and protection of the University's IP is provided by the Research Innovation Office (RIO). CSER, for example, was supported by RIO in the creation of patents jointly with Badminton England, as a consequence of its UK Sport Innovation Partner work. RIO also has a Proof of Concept fund for early-stage research to develop ideas. Marketing expertise is provided by the University, with websites and documents for download: <http://www.shu.ac.uk/research/cser/research>).

**c. Strategy and plans**

The four research centres in this UoA place impact centre-stage: the third objective outlined in REF 5 is to focus on applied research that can create impact in society and make a substantial contribution to evidence-informed policy making. The primary objective with respect to impact is therefore to win research projects with a variety of clients who want to achieve impacts for their products and services and with customers and/or stakeholders. In order to achieve this objective it will be necessary to:

- at least maintain the amount of research income in the REF period 2014-19;
- invest in the UoA's staffing and infrastructure (particularly lab space for CSES and CSER), so that the procurement and delivery of impact-generating projects is not just maintained but enhanced;
- invest in upgrading capacity and skills in the effective dissemination of research findings, particularly through the use of infographics and social media, to reflect the rapidly developing nature of dissemination;

**Impact template (REF3a)**

- invest in developing UoA staff capability to promote and facilitate the impact-generating consequences of research; this will require a more proactive approach to working post-project with clients in order to help in the implementation of research recommendations;
- monitor the effectiveness of our role in generating impact from research, through post project reviews and annual appraisals of staff.

**d. Relationship to case studies**

Our impact case studies were chosen as exemplars of our approach. They all demonstrate the importance of working with partners committed to generating impact. The case studies also demonstrate synergies between completing a research function and then using results to achieve identified impacts. Case study 1 (behaviour change DVD) had as objectives both securing impact, increased physical activity with associated beneficial health impacts, as well as assessing the means for achieving this, the DVD. Case study 2 set out to achieve a public engagement impact by promoting findings from sports engineering research. Case study 3 shows how the UoA used results of research into major events in order to construct an evaluation and forecasting toolkit, to generate impact in the form of improved evaluation and decision making in hosting such events. Case study 4 (3D measurement systems) refers to research which was commissioned in order to achieve an impact: improved elite performance in sport. All case studies are therefore consistent with the primary strategic objective for impact stated above.

Three case studies demonstrate the importance of rich partnerships in achieving both the underpinning research and the consequent impacts. For case study 1 (behaviour change DVD), NHS local agencies were vital commissioning and facilitating partners, having a primary objective of achieving impact through changes in physical activity. For case study 3 (major events), UK Sport was the key organisation funding the process of research and framework development which helped to improve evidence-informed decision making for hosting major events. For case study 4 (3D measurement systems), UK Sport was again a key agent in commissioning the research which led to improvements in the evaluation of elite sports performers, enabling their performance to improve.

The same three case studies also demonstrate how such partnerships help to maintain a continuing programme of impact-generating research funding for the UoA. Case study 1 (behaviour change DVD) began with a pilot study which led to the innovative project in Barnsley, featured in the case study; further funding has since been awarded for a similar project with a different population. Case study 3 (major events) features a rolling programme of research, toolkit development, and evaluation and decision-making impacts - a process which the UoA is planning to extend through future events. Case study 4 (3D measurement systems) also features an evolving programme of research and product development with proven impacts; a programme which has diversified into health applications which were not expected at the outset.

Two of the case studies have been instrumental in informing specific strategic objectives for impact in the UoA. Case study 2 (public engagement) has been important in identifying the strategic objective of investing in dissemination capacity and skills, because of its success in reaching large audiences through media which have not been fully exploited in the past. Case study 1 (behaviour change DVD) helped to identify the strategic objective of investing in staff capability to promote and facilitate impact-generating consequences from research, i.e. to ensure where possible a hands-on role in generating the desired impact.

All four case studies have informed the strategic objective of investing in the UoA's staffing and infrastructure. Seven staff featured in the cases have achieved promotion in the current REF period - (Allen, Choppin, Wheat; Breckon, Copeland, Crank; Ramchandani). The case studies have also confirmed the importance of monitoring projects' effectiveness in generating impact, both for the evaluation of projects and of the staff involved.