

Institution: Aberystwyth University

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

a. Context

The Department of Sports and Exercise Science engages in a range of research activities that cluster around two themes. The first theme examines physiological and psychological factors that affect **Human Performance**, including the performance of individual athletes, sports teams, and coaching staff. The second theme focuses on **Physical Activity in Ageing, Rehabilitation and Health**. Research in this theme aims to enhance the beneficial effects of rehabilitation exercise, either through increased efficacy of the exercise regimen, or through increased rates of participation, compliance and completion.

The main non-academic users of our research include the organisations and individuals involved either in the development and implementation of training procedures to enhance performance of elite athletes, or in the planning and delivery of exercise interventions for older people living in rural communities. The main beneficiaries of our research have been sports coaches and elite athletes, on the one hand, and commissioners of rural healthcare services and older people living in rural communities, on the other.

Research in the Department has generated four main types of impact:

1. **impact on professional practice.** This impact derives from our research in exercise physiology that has informed the development of performance-enhancing warm-up procedures or, more accurately, priming exercise. Impact has been achieved through consultancies, partnership research and professional exchange with national organisations involved in training elite athletes, such as the English Institute of Sport.
2. **impact on professional services.** This impact is underpinned by our research evaluating exercise schemes delivered in rural communities. Impact has been achieved by engaging key stakeholders in the research process, and through the delivery of robust, relevant research findings to inform the decision-making process.
3. **impact on health and well-being.** This impact refers to beneficial effects among older people living in rural communities, through research that has led to improved access to, effectiveness of, and engagement with, community exercise schemes.
4. **impact on society.** This impact includes the influence on changing attitudes and behaviours of sub-groups in the general populations, in particular amateur athletes and sedentary older people. Impact has been achieved by wider, independent dissemination of our research through, for example, television interviews, magazine articles and public health reports, as well as dissemination using Welsh-language media.

b. Approach to impact

Our approach to impact has evolved over the census period. It is clear that, before 2010, we were not engaged explicitly with the impact agenda. The inclusion of 'impact' in the REF sharpened our focus on impact in terms of not merely the relative importance of impact but, more specifically, the importance of evidencing impact beyond the narrow limits of traditional academic audiences.

From 2010, our immediate approach to impact sought to identify potential impact case studies by searching for evidence of impact from research produced by staff in the Department. Whilst this approach was driven by necessity, it clearly was unsatisfactory, since the young age of the Department (founded in 2002) and the small size of the staff group (10.2 FTE) necessarily reduced the pool of research from which we might be able to evidence impact.

The experience of searching for serendipitous impact of our research made it clear that if we are to develop impact for our current and future research activities, there is an unequivocal requirement for closer collaboration with the users and beneficiaries of our research. Our second approach to impact, therefore, has been to engage with key stakeholders to identify, refine and exploit

opportunities for collaboration and, subsequently, to develop strategic alliances that deliver a joint research agenda with maximum potential for demonstrable impact.

- **Engage key stakeholders.** To enable staff to engage, and strengthen relationships with, key users, the Department has supported staff (e.g. time, finance, planning, etc.) in organising and hosting events that bring together key stakeholders (e.g. targeted advertising, invitation, initiating contact, etc.), including policy-makers, practitioners, and local people, as well as relevant organisations in the public, private or voluntary sectors.

These events have included *the Age Agenda in Aberystwyth* (June 2011: <http://www.aber.ac.uk/en/news/archive/2011/06/title-99845-en.html>), *Preventing Harm from Falls* (Oct 2012: <http://www.wales.nhs.uk/sitesplus/862/news/22941>), and the *Mid-Wales Diabetes Information Evenings* (running quarterly since March 2011: <http://www.aber.ac.uk/en/sport-exercise/latest-news/newsarticle/title-117235-en.html>).

- **Strategic Insights Programme (SIP).** This HEFCW scheme provides an opportunity for HEI staff to undertake a fully-funded short-term placement with any UK organisation in the private, public or voluntary sector. We have used the SIP as a formal infrastructure mechanism for staff to engage with key users, and have encouraged and supported staff to take advantage of this opportunity.

To date, we have completed two SIP placements – one regionally with Hywel Dda Health Board (Hughes), and the other nationally with Public Health Wales (Oliver). In addition, we have been awarded three further SIPs to be completed in 2014 – Somerset County Cricket Club (Low), and the Defence Medical Rehabilitation Centre at Headley Court (Arkesteijn).

- **Building strategic partnerships.** The effectiveness of our user engagement strategy is indicated by the developmental nature of our relationship with key stakeholders, progressing from engagement activities to strategic partnerships. Evidence of our success in building strategic partnerships includes:
 - a formal Memorandum of Understanding with Hywel Dda Health Board (led by Hudson), supported by a jointly funded Readership in Rural Health and Well Being, and a post-doctoral research fellow, both with a specific remit to identify and develop collaborative research opportunities;
 - membership of strategic advisory boards, including Public Health Improvement Research Network (Bridle), the Ceredigion Older Peoples Partnership (Oliver), the R&D Management Committee of Hywel Dda Health Board (Bridle; Thatcher), and the Ceredigion Strategic Falls Group (Hudson; Oliver);
 - award of two Knowledge Economy Skills Scholarships, part-funded through the European Social Fund, in collaboration with industry partners - European Aeronautic Defence Systems (Thatcher – human performance under increasing environmental stressors), and Broadsword Technology (Hudson – enhancing motivation to exercise within online gaming);
 - establishment of the UKactive Research Institute, based at the Universities of Greenwich and Aberystwyth (with Beedie as Director), to provide an evidence base for physical activity and exercise programmes delivered by the private sector (Fitness Industry Association). The Research Institute is sponsored by MyZone, LifeTime, Alere and BodyStat.

c. Strategy and plans

In February 2013 we implemented a 5-year research strategy, an explicit aim of which is to maximise the demonstrable impact of our research. The strategy sets explicit performance goals, including the requirement for all staff to produce an impact statement relative to their individual research activity, and for each research group to produce at least one impact case study during the next assessment cycle. Additionally, each research group will work collaboratively with the DoR to develop, implement and monitor a tailored, group-level impact strategy, which aims to extend both

the reach and significance of the group's research impact.

The operationalization of the strategy signals a clear intent to achieve impact by design rather than chance, by ensuring impact is considered and planned for at all stages of research. To achieve this we have embedded impact components into the Department's core academic activities, including:

- **individual research plans.** All staff develop individual research plans, approved by the Director of Research (DoR) (Bridle), which include an outline of the potential impact of the proposed research, including identification of likely users and beneficiaries of the research findings. This information is used, for example, to initiate early engagement with key stakeholder.
- **annual staff reviews.** Assessment of the impact generated by planned research activity (or potential for impact to be generated) has been incorporated into the annual performance review of individual staff, and actions to support staff achieving research impact are referred to the DoR. This information will inform, and be informed by, the Department's annual research report and our developing impact monitoring protocols.
- **research group impact strategy.** Each research group will work collaboratively with the DoR to develop, implement and monitor a tailored, group-level impact strategy, which aims to extend both the reach and significance of the group's research impact. The strategy will distinguish between levels of increasing reach, such as regional, national and international reach and, at each level, identify intended users and beneficiaries of the research.
- **impact monitoring protocols.** We will develop and implement protocols to monitor, and draw intelligence from, a range of internal (e.g. annual staff review) and external (e.g. use of our research by the intended users of our research) data on the reach and significance of research impact. We will continue to refine and develop the analyses that underpin our impact strategy decision-making, and report annually on performance.
- **annual research report.** The annual review of the Department's research performance will include assessment of impact performance, highlighting impact successes, lessons learned and, where necessary, implement remedial strategic actions, such as refining our impact monitoring protocols and informing individual research plans and impact statements.

d. Relationship to case studies

Our two case studies reflect our differing approaches to impact over the assessment period. The first case study (performance-enhancing warm-up procedures), provides a good example of how our lab-based research can have a distinct and material impact in the real-world, despite the impact being more serendipitous than planned.

The second case study (community exercise schemes) provides a good example of how our approach to impact, based on engaging end users, transitioned away from the retrospective and towards a more prospective approach. The impact achieved in this case study was clearly supported by our approach to impact, which focussed on engaging key stakeholders in the research process, and producing evidence to meet the needs of end users.

Both of our impact case studies have informed the development of our impact strategy as we move forward. Informed directly by the success of the approach to impact described in our second case study, the core feature of our strategy is to engage with key stakeholders to identify, refine and exploit opportunities for collaboration and, subsequently, to develop strategic alliances that deliver a joint research agenda with maximum potential for demonstrable impact.

Our impact strategy has also been informed indirectly through the process of developing our case studies. The process has increased our awareness of the scope and extent of 'impact' and how it can be generated and, in so doing, helped us to identify pathways to impact for future case studies that would not have otherwise been considered, and to develop protocols to monitor and record impact proactively.