

<p>Institution: University of Lincoln</p>
<p>Unit of Assessment: 26 Sport and Exercise Science, Leisure and Tourism</p>
<p>a. Context</p> <p>The School's impact goal</p> <p>Since the formation of the School of Sport and Exercise Science in 2006 it has built an extensive network of partnerships with both academic and non-academic organisations. The primary goal of these partnerships has been to identify important challenges that require research to provide understanding of the topic, and to empower the organisations to act upon the research. These partnerships continue to be strategically developed and managed through our key research groups.</p> <p>Research beneficiaries and types of impact</p> <p>The impact from our research is aimed at a number of beneficiary/stakeholder groups including:</p> <ul style="list-style-type: none"> - the general public (e.g. through research on local and national community schemes such as 'walk well', 'green exercise' and 'food for fitness' [e.g. Crust 2013]). Many of these schemes are health promotion initiatives; hence the impact variously contributes to health, improves quality of life, and reduces economic costs (as seen, for example, in the reduction in North East Lincolnshire obesity levels [Middleton 2010]); - individual sports competitors (e.g. research has been conducted on children in gifted and talented programmes, adult recreational players and elite athletes [Thomas 2010]). The type of impact varies from, for example, the Lincolnshire County Sports Partnership improving their approach to sporting talent identification in young children [Thomas 2010], to top-level athletes implementing effective and novel real-time biofeedback training to improve performance [Mullineaux 2012]; - organisations related to promoting health or governing sport (e.g. through research with England Golf, formerly English Golf Union (see impact case study) [Piggott 2010], North East Lincolnshire Care Trust [Middleton 2009], and Lincolnshire County Sports Partnership [Bishop 2009]). The research assists the organisations in formulating policies to, for example, implement more effective targeting, understand feedback, and modify sport management provision (as evidenced in changes to England Golf's Whole Sport Plan 2013-19 [based on work by Piggott 2010]); - businesses and charities that promote health and sport (e.g. CfBT Education Trust, who develop worldwide educational benefits, including encouraging children to be more physically active [Thomas 2011]). The research assists these beneficiaries in understanding concepts and strategies, knowledge of which they use to adapt services in an attempt to develop benefits such as a healthier workforce, improved efficiency and greater productivity. <p>Relationship to research activity and groups</p> <p>We work in both responsive and proactive modes in the origination of research projects. We have, during the REF audit period, in one mode, seen a growth in direct requests for the School to conduct research (e.g. work with Lincolnshire Sports Partnership [Henderson 2012]). This research is often focussed on a single-issue topic. Such research is valuable as it enables the School to understand the needs, scope and working practice of the partner; and, through research management, single-issue projects help inform the work of the research groups and School. For example, CfBT Education Trust was interested in assessing the effectiveness of their initiative to install playground markings in schools for foundation age children (aged 3-5 years old) [Thomas 2011]. The successful completion of this research by the School has led to a stronger partnership, with a more in-depth assessment of the government's curriculum changes being undertaken in a longitudinal manner as further new curriculum innovations have been implemented [DEvans 2012]. In proactive mode the School initiates and leads the research agenda, with impact possibilities at the forefront of the planning. Such research often incorporates greater originality, and the team are able to consider more rigorous and complex projects to direct the research, based on scientific principles and theories that are borne out of one or more of the research groups. For example, working with a top-level rifle coach led to a randomised-controlled trial of biofeedback to identify novel training methods for enhancing performance of top-level shooters [Mullineaux 2012]. In both modes the research groups play a central role in supporting impact through frequent liaison and monitoring of the research to identify and provide guidance and necessary resources to staff. In particular, they act as a mechanism for staff support through mentoring and development, and unite the approach to impact through continuing to develop the School's experience and expertise</p>

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in translating research into formats that partners and consumers can understand and implement.

b. Approach to impact

Our approach to impact is based on a number of key elements, most notably: developing strong partnerships, stakeholder involvement, building on staff specialisms, building impact plans into research design, and effective dissemination. A valuable underpinning of impact has been through staff developing and strengthening partnerships with organisations and businesses with sport and health remits, and then conducting studies that align with the priorities and research agendas of the partners. This has led to a range of impacts that can be evidenced across the network of our partnerships. For example, a comprehensive evaluation of the 42 obesity prevention programmes aided the North East Lincolnshire Care Trust in assessing the effectiveness of the area's programmes [Middleton 2009]. Collaboration with local government organisations in its area was beneficial in enabling the prompt and timely completion of research to assist the Trust with annual budget planning and the modification of its strategies [Middleton 2009].

Continual strengthening of partnerships has resulted in significant work around creating user-relevant research [e.g. Henderson 2012, where prospective research on a community physical activity promotion initiative was designed to address research priorities and consider elements in generating impact]. Our approach has included incorporating into our impact strategy the views of the various stakeholders, resulting in more rigorous studies and enhanced skills of staff, particularly in early career researchers (ECRs).

Importantly, impact is not separated from the development of a suitable research strategy to: build on the interests, experience and expertise of staff; consider local circumstances including geographical weaknesses and strengths; and identify worthy research areas that reflect existing strengths and help generate areas of expertise for the University. To generate impact, as a minimum, all research is either fed back to supporting groups, or disseminated via reports or presentations.

Evidence of relationships and interactions

Our research is also promoted through a range of methods of dissemination, and our approach to impact in that context is achieved through a number of mechanisms, including community workshops to raise stakeholder and public awareness [e.g. Smith 2012], incorporating findings into services advertised and offered (e.g. biomechanical golf analysis service [e.g. Mullineaux 2011]), publishing results in sport and lay magazines [e.g. Murgatroyd 2010], and involving the University's Press Office in distributing press releases locally, nationally and internationally. The use of electronic resources, such as each of the five research themes' webpages, blogs and videos on the School website, has also been beneficial, and has attracted interest from external groups. Involving participants and the public is also an important element of our approach. For example, in an ongoing study assessing the effects of a Mediterranean diet intervention on health [Smith 2011], at an interim point participants and representatives of the wider community were invited to a highly successful public seminar delivered by the researchers, with a presentation and panel discussion. Such events are regularly utilised as both an aid to develop researchers' skills in communicating with and including the public, and as an excellent catalyst for researchers to appreciate non-academic views and incorporate such views into the research design or feedback of results.

Using supporting facilities and resources

There are a variety of forms of institutional support for staff in identifying methods to promote the impact of their research provided through:

- the University's support infrastructure, including Human Resources, Press Office and Research Office. These departments offer a mixture of active support and training courses, seminars and workshops to assist the researcher in learning skills for disseminating their work and impact generation;
- at the School level, so that potential impact of all research is considered, staff are required to discuss their impact plans and describe impact on the ethics application forms, indicating who will benefit, processes to achieve this, support required (e.g. expertise, financial, from who) and timescale. This has been a valuable means of encouraging researchers to seek advice on and promote the importance of impact;
- the research group level, during the regular meetings (approximately four times per year for each group), discussion includes methods to promote impact of existing research and to incorporate

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impact into new research. The extent and immediacy of impact of the research is discussed, and enhanced by the attendance of colleagues from the wider university and representatives from non-academic partners. By discussing the extent of likely impact, immediacy and mechanisms of enhancing impact, these sessions are valuable for both established and ECRs.

Funding at the School, College and institutional (e.g. Impact Generation Fund) levels can be used to develop wider reach internationally and promote the innovative adoption of research with new partners. As part of the capital expenditure programme, priority is given to purchasing bespoke portable equipment to enable greater flexibility to work with clients in more 'natural' environments. This enhances our capabilities to interact with coaches, players and spectators, for example, exhibiting at the international cricket between England and Pakistan women in 2013 [Mullineaux].

c. Strategy and plans

Developing strategy

The School's impact strategy is founded on promoting an impact-focussed culture among researchers, through training and sharing of experience, with an emphasis on learning from the experience of colleagues, both within the School and across the University. Staff are involved in developing an impact-focussed research agenda (e.g. through non-academic partnerships) and implementing approaches to generating impact. Although generating impact has always been a significant goal of research within the School, this is now formalised through requirements such as indicating the intended impact processes on ethics applications, and monitoring this through a range of regular events with non-academic partners and groups.

Impact is enhanced by training all researchers to have an awareness of the importance of and range of methods available for achieving impact. All researchers are included in activities of assessing impact to better understand the process. This is facilitated through regular research group meetings, where there is sharing of experiences of what has worked in previous and ongoing projects by considering:

- optimising the extent of the impact for each beneficiary;
- broadening the available and best methods to target each beneficiary;
- assessing the immediacy/time-scale of any impact;
- expanding the existing status of relationships with each beneficiary;
- identifying methods for building on, modifying, initiating and enhancing impact;
- identifying additional potential beneficiaries.

These, in turn, feed into future projects.

Future plans

Our goal is to implement selected, broad and targeted impact strategies through:

- looking to generate impact in the areas most specific to our expertise and direction;
- building on work with local and regional partners to enhance national and international impact;
- raising public awareness of research through a wide variety of forms of dissemination;
- identifying and incorporating key stakeholders early on, including during the planning stages of research, and building relationships over time to enhance the impact in the future.

d. Relationship to case studies

A primary aspect of our approach has been to create a meaningful, timely and lasting impact. The opportunity to work with partners has also been valuable, as can be seen in the case study on obesity prevention, which also provided early career staff with valuable insights into the views of non-academic organisations, their operations, needs and expectations, that significantly shaped the approach to impact in subsequent projects. It also illustrates how developing partnerships raised the profile of research and allowed us to work with key organisations. The contribution of our research to reducing obesity levels has been instrumental to the way in which stakeholders are perceived, and has informed how we build impact into future projects of a similar nature. In the second case study, a partnership was developed with a National Governing Body, and the research results were used by England Golf in its Whole Sport Plan for 2013-17, to widen national participation in golf. This example emphasises how influential research can be, and the value of using multiple feedback formats to ensure the results are interpreted appropriately. Both reflect the benefits of developing long-lasting partnerships that enable a continuous two-way flow of knowledge, which can in turn enhance the utility and the impact of research findings.