

**Institution: Staffordshire University**

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

**a. Context**

Our research has improved health behaviour in deprived communities, enhanced the psychological and physiological training programmes of athletes in professional and national sports teams, and has underpinned product development with partners in industry. We have focused on engagement with stakeholders at a national and international level to influence practice and policy, most notably around improving health behaviours in deprived communities, and helping athletes perform under psychological stress. This work has been disseminated through media coverage, public engagement events and invited presentations. These impacts draw on our collective research expertise in psychology, biomechanics, physical activity and health, and physiology. It reflects the University's aim (University Plan 2012-2017) that we are focused on applied (end-user) research. The main beneficiaries of our impact are outlined below.

Health Organisations

We have worked with NHS Stoke-on-Trent, Stoke-on-Trent City Council and local third sector bodies to improve the health behaviour of people from deprived communities using a social-ecology approach centred on increasing community engagement and changing the environment (see case study 2). Naemi has also led work improving the care of frail elderly by introducing exercise interventions and monitoring in the community (<http://bit.ly/1f81S0e>). Our work on increasing physical activity levels has also been applied by a PhD student, under the supervision of Gidlow, in partnership with Sandwell Primary Care Trust to increase physical activity levels of >1000 participants (the 'Walk to Beijing' project inspired by the 2008 Olympics; <http://bit.ly/1hmxod1>).

Public Bodies

Work to encourage sport for persons with disabilities (Chockalingam) was cited in a 2012 parliamentary report on science and technology in sport presented in the House of Commons (<http://bit.ly/17NLZvr>). Our work with local government organisations is evidenced in case study 2, for example through the establishment of a Health Impact Assessment Peer Review service for developers wishing to build in Stoke-on-Trent (<http://bit.ly/1aOpxOS>). Case study 2 also outlined our work in the Natural England funded 'ProGreSS' project which involved engagement with the police, local schools and youth workers to improve the use of a local park, and it also outlined our work with third sector organisations to ensure a sustainability to our work.

Industry

We have strong relationships with national (Salts Healthcare, Algeos, CL-7) and international (ASICS, TechnoFootbed, Tekscan, AR Hospitals) industry based on our research expertise in biomechanics. Our research has been applied to the design, development and evaluation of products ranging from sport and clinical shoes to personal protective equipment like knee pads. In addition, based on our footwear research we have developed skills and professional development modules in conjunction with the company 'Profeet' to be delivered for interdisciplinary professionals in the footwear industry. Chockalingam has also given an invited lecture at the Orthotic Technology Forum (Georgia Tech, Atlanta) which attracted industry leaders. Our research in stress emotion and performance, social identity and group functioning (Jones, Turner, Slater, Barker) has underpinned partnerships with business. This has resulted in training programmes being run for SONY Europe and SONY Mobile on leadership, effective group functioning and dealing with stress. In 2013 we developed with K2 Consulting (a management consultancy) on-line leadership development and stress management courses for a range of companies. Workshops based on our research on 'challenge and threat' responses to psychological stress have been delivered to managers from the North Staffordshire Chamber of Commerce and the South Staffordshire and Shropshire Health Care Trust.

Sport and Performing Arts Organisations

We have worked with performance directors, directors of sports medicine and coaches and instructors in a range of sports, in particular football, at an elite level as well as in other performance settings (see case study 1). This has included working with Stoke City Football Club where our research expertise has underpinned the creation of three PhD student bursaries (fully funded by the football club). These students work full time at the academy developing, and

**Impact template (REF3a)**

delivering, programmes in physiological training, match analysis and psychology informed by their research. This arrangement, led by Unnithan, has been positively evaluated, with Stoke City Football Club Academy achieving Category One status, when audited by the FA Premier League, and the sport science provision receiving the maximum possible score. Unnithan also works with Wolverhampton Wanderers Football Club Academy advising on the talent identification of players through his PhD student. For six years Barker has been leading the sport psychology provision with Nottinghamshire County Cricket Club. In addition, Barker sits on sport psychology advisory boards with the England and Wales Cricket Board and the Football Association. Jones, Turner and Slater have provided sport psychology support to Stoke City Football Club Academy (2012-present day). Both Slater and Turner provided sport psychology support to Nottingham Forest Football Club Academy (2010-2012) and Slater has provided sport psychology support to Stoke City Football Club Ladies team (2010-present day) and in 2013 Turner took up a post as sport psychologist with the England Futsal team. The work of Jones, Turner, Barker and Slater on 'challenge and threat' in sport and the protocols developed for the assessment of responses to stress, have been utilised by Stoke City Academy, the England U19 cricket team and Nottinghamshire County Cricket Club teams. We will shortly be applying this protocol with the Great Britain senior rowing team, England Futsal team and Great Britain shooting squad, and are applying it to students who have difficulty dealing with the pressure of examinations (see case study 1). In all settings this protocol is used as a development tool to help individuals consider how they can respond more effectively to stress. Woodcock is applying her research in performance psychology with psychological support offered to two different vocational dance schools (Elmhurst School for Dance [Birmingham Royal Ballet], English National Ballet School), working with dancers aged 11-21. This consultancy has been underpinned by funded research into the psychological demands of developing dancers which has informed the delivery of the programme.

**General Public**

There are two main aspects to our work with the general public. The first is that we have worked with the local community, through project-specific community groups, to improve the health behaviour of people from deprived communities and to ensure the sustainability of these positive changes (see case study 2). The dissemination of our research to the public is also important and Jones has spoken, on behalf of the British Psychological Society (BPS), at the prestigious public engagement events; British Science Festival (2012), Cheltenham Science Festival (2012, 2013). Jones was also part of a team asked by the BPS to design and run a public engagement study during the London 2012 Olympics as part of its 'Going for Gold' initiative to bring psychology to the public. An initiative to which he, Turner and Barker, also contributed more widely (see <http://www.bps.org.uk/going-for-gold>). Naemi and Needham appeared at a flagship event on science in sport at the Science Museum in London to coincide with the London 2012 Olympics. The Basil Ashford memorial lecture is always open to the public (the flagship event of our research seminar series) and this is held annually. Unit staff have also appeared on numerous occasions in the media discussing academic and scholarly work, for example: Radio 5live (Jones, Barker); BBC Radio Stoke (Barker, Chockalingam, Gidlow, Jones); Radio Cymru (Jones); BBC WM (Chockalingam) as well as numerous papers (e.g., Telegraph, Independent, Sentinel), magazines (e.g., Psychology Today) and websites (e.g., BBC Sport, BBC News).

**b. Approach to impact**

Our approach to impact reflects the University's aim of collaborating with end-users to conduct research in real-world settings that benefits organisations, communities and individuals. This is supported by institutional structures and expertise, including the Centre for Sport Health and Exercise (CSHER) which guides work in this unit.

**Institutional Structures**

Research, Enterprise and Scholarship are interlinked in the University. The CSHER operates under the supervision of the University Research Enterprise and Applied Scholarship Committee (REASC), which implements the University's Research, Enterprise and Scholarship strategy (see REF 5 for a detailed description of the organisational structure). Regular CSHER meetings are held twice a semester and are attended by a member of the University's Enterprise and Commercial Development (ECD) team to brief staff on potential opportunities.

**Institutional Expertise**

The ECD team offer a range of support to staff. They make links with organisations outside

## Impact template (REF3a)

academia and where staff have ideas for potential projects they carry out the market research. An example of this is ECD working with Jones, Barker, Turner, Slater and Woodcock to develop a series of bespoke course for companies to enhance performance and well-being based on our research (<http://bit.ly/17wQhpU>). ECD also match up requests from local businesses to relevant academic staff, submit research-related bids to non-academic organisations, do contract negotiations, provide company liaison support (e.g., Profeet project), and provide finance to support innovative projects with impact outside academia (e.g., K2 Consulting project). The team also provides advice on knowledge transfer projects. Support is also provided through regular workshops and individual consultation. The University press office publicise research outside the academic arena, through press releases, a twitter account (@StaffsUni) and the front page of the University website has an audio-visual presentation, which has featured unit staff on a number of occasions discussing research.

### CSHER Activity

We have a well maintained website (<http://bit.ly/1ajQuPr>) on which we provide information on staff expertise, publications, and a number of flagship research projects. Staff disseminate work to non-academic organisations and publicise research work through the website and also through e-newsletters and twitter feeds of specific research projects (e.g., @greenhealth4eu) or staff (Gidlow, Jones, Barker, Turner, Woodcock, Slater). Money is available in the staff development budget to support staff in travelling to publicise their work to ensure impact.

### **c. Strategy and plans**

Our strategy and plans for impact are reflected in the aims of the unit outlined in REF5. Maximising the potential impact will enhance the economic, commercial, environmental, cultural and social benefit of the unit's research. The specific targets outlined in REF5 that relate predominantly to impact are:

- To build on our strong partnership achievements and to observe a year on year increase in partnership activity with external organisations and industry.
- To popularise, and disseminate, our research through increasing public engagement activity.

To increase our impact we will over five years:

- Work with ECD to achieve an annual income >£100,000 from bespoke professional development courses underpinned by our research.
- Achieve two Knowledge Transfer Partnerships in the next assessment period.
- Secure >2 more substantial European funded research projects. This helps our research have impact because a substantial aspect of European funded research projects is the dissemination of the findings to appropriate end-user groups.
- Maximise the impact of our research on public policy by working closely with our local, national and international partners to disseminate our research.
- Develop and run a programme of public lectures based on our research.
- Provide staff development workshops on the use of social media to disseminate research.
- Work with the media team to achieve a 50% increase in the volume of media coverage.
- Monitor research and enterprise activity through the line management system.

### **d. Relationship to case studies**

The two case studies reflect our approach to impact in that they both reflect long-standing relationships with end-users which build on internationally renowned research expertise. Further the value of our research is evidenced in that our partners have chosen to fund these ongoing relationships, even after original funding has ceased. They also reflect our commitment to multidisciplinary research, for example case study 2 involves academics from psychology, physical activity and epidemiology working together. Our commitment to influencing policy and practice is also evidenced. For example, our work outlined in case study 2 currently informing the PHENOTYPE project, will be disseminated Europe-wide and to the European Commission. Our work in sport science, outlined in case study 1 is directly influencing the psychological development of young people at professional football and cricket academies and is increasingly being applied in elite sport and business settings.