

Institution: University of Hertfordshire

Unit of Assessment: Panel A (4): Psychology, Psychiatry and Neuroscience

a. Context

UH Psychology has for many years had a clear focus on the impact of its research. Our post-RAE research strategy set the deliberate goal of increased engagement with non-academic audiences, including businesses (through Knowledge Transfer Partnerships) and people in health settings (though the Centre for Lifespan and Chronic Illness Research and the Centre for Personal Construct Psychology). Specific beneficiaries are outlined in section b, but these include: the general public (through initiatives focussed on public understanding); health charities and other health user-groups; parents in low-income families; people with visual impairments; and small businesses (with particular focus on behaviour change and environmental initiatives). Although several of our staff have prominent public profiles, our impact generation draws on staff in all five research groups. It has been and will continue to be a priority for research staff in our unit.

b. Approach to impact

UH was recognised as the 2010 THE Entrepreneurial University of the year, reflecting a willingness across the university to engage with businesses and communities. Here, we set out a number of our unit's specific impacts before describing how these illustrate the approach that we have taken, and the support we have given, in their achievement.

Impact on Public Understanding. UH Psychology is one of few units (and the first) with a Chair in Public Understanding of Psychology (Wiseman). Wiseman encourages critical thinking and draws public attention to the distinction between science and pseudo-science. His cross-media work draws together, in a digestible form, data from an enormous range of peer-reviewed self-help studies, with a view to encouraging a critical mind-set in the audience. He thus enables the public to make more informed choices. Combining psychological expertise with experience as a professional dancer, Lovatt set up the Dance Psychology Lab in 2009-10. Since then, he has brought dance psychology to international audiences with well-reviewed TED talks (Berlin, Oslo, twice London), and high-profile public presentations (Science Museum, Royal Institution, Wellcome Collection, Sadlers Wells, etc.). His recently filmed Channel 4 show demonstrates the benefits of dance to health/wellbeing in a number of everyday settings; it has been supplemented by recent engagement with a more specific beneficiary group, namely, people with Parkinson's disease. In the early stages of his research programme. Lovatt worked with Parkinson's UK to investigate how dance positively affects both physical (mobility, posture) and psychological (cognitive function) functioning in Parkinson's patients. Parkinson's UK contributed by allowing Lovatt to advertise their study for free on their website and by sending participant-recruitment emails to members of their research supporters' database. Thus the demonstrable reach of Lovatt's public-facing work is complemented by the participation of, and benefits to, this specific user group. Further impact of our neuropsychological research has been evident in the widespread media interest in the work of Laws, particularly in relation to his work on gender differences in dementia and in everyday cognition, the ineffectiveness of ginkgo biloba, and the cognitive consequences of ecstasy use. Moreover, Laws' contribution to the Wellcome Trust Eureka Live series showed how public debate is informed by our unit's research (impact on society, culture and creativity).

Impact on Health. UH Psychology has always had a strong, pragmatic health-related research base. **Done** and health and clinical colleagues at the Centre for Lifespan and Chronic Illness Research (CLiCIR) examine psychological issues in End Stage Renal Disease. The team's early publications and subsequent externally funded studies have informed service development. As a result, Conservative Management programmes have been adopted in 66 of 72 centres across the UK, delivering care to over 1,200 patients annually (impact on **care practices**). CLiCIR research has been instrumental in developing NHS and Renal Association Guidelines and the Department of Health's National Service Framework for Renal Diseases. CLiCIR researchers are developing guidelines for psychological interventions in renal patients, and their treatment adherence guidance will be included in forthcoming British Renal Society guidelines. Their research on tests for adherence in the treatment of Early Rheumatoid Arthritis (ERA) was shortlisted by the ESRC for impactful doctoral research in 2010, and other CLiCIR work on ERA has informed i) NICE



guidelines; ii) an NAO report on early intervention; iii) Standards of Care for People with Inflammatory Arthritis published by the Arthritis and Musculoskeletal Alliance; and iv) a patients' page on the National Rheumatoid Arthritis Society website. For these reasons, the ERA Network website identifies CLiCIR as a Major Academic Collaborator. Troop was commissioned by the Haemophilia Society to identify psychological factors relating to vCJD screening, so they can develop policy for their members. This led to the establishment of a Research Steering Group with the society, clinicians and people with haemophilia. The society has provided MSc Health placements and collaborated on research projects on adherence to prophylaxis and on the use of mindfulness-based pain management. The research has benefited from a department-funded PhD and two external grants awarded by international pharmaceutical companies. Active involvement of patients in the research agenda relevant to their condition is taken as a marker of significant impact (enhancement of patient experience). Winter's research has had unique impact and international reach. Via a programme of research and staff training, he has been involved in fostering a more humane approach to treating people with mental health problems in Sierra Leone. Consequently, the proportion of in-patients restrained by chains at the participating psychiatric hospital has reduced by more than two thirds, from 75% to 25%. The work has been funded by various bodies, notably the Tropical Health Education Trust. It is a quantifiable example of impact on international development, whereby quality of life in a developing country has improved.

Impact on Parents. **Pine and Kirk's** longitudinal research into children's gestures led to the design and evaluation of an intervention to improve the language abilities of infants from poorer families. Hertfordshire County Council provided £30,000 that enabled the successful intervention to be delivered across the county, in targeted Sure Start children's centres situated in areas of economic deprivation. This is a direct impact on **local government policy** and affected families.

Impact on the Visually Impaired. Our former **Sensory Disabilities Research Unit**, currently represented by **Kornbrot's** continued collaboration with Petrie (York), continues to generate impact. It has generated British Standards (implemented internationally) for Web Accessibility Standards, as outlined in the Equality Act 2010. The work has led to a series of award-winning guides for blind users of Windows software, a very large and globally distributed beneficiary group.

Impact on Businesses and the Environment. Fletcher and Pine's impact case study outlines DSD's award-winning application in the business domain, as part of a diversity intervention with 16,000 staff at Price Waterhouse Cooper. Pine's co-authored book, Sheconomics (2009) applied DSD to personal finance for women, now adopted by the financial consultancy Wise Monkey. **Pine** has acted as advisor on female economic behaviour to the government's Money Advice Service and a range of business organisations including First Direct Bank and Capita Registrars. Page has worked on several carbon reduction projects with businesses. He directed the EASIER Project that engaged 50 SMEs with substantial carbon reduction advice. He was commissioned by Resource Efficiency East to write a 50-page 'Guide to Resource Efficiency in the Hospitality Sector' and to run associated workshops. The project engaged 96 SMEs and resulted in CO2 savings of 87 tonnes by project close (impact on the environment). In the Cube Project, he designed and had manufactured an exemplar low-carbon dwelling (QB1), exhibited to 2,000 visitors at the Edinburgh Science Festival, 2011. The accompanying website/video received over a million views and, following over 200 purchase enquiries and 15 licence enquiries worldwide, a production model (QB2) has been developed with £32,000 from UH Invest. QB2's internationally registered design is now licensed for manufacture/sale by a UK SME (impact on commerce and on production).

Our approach: All of the impact described above stems from a deliberate strategic approach to supporting impact from our research, including by:

1. Dedicating staff time to impact. With specific reference to the impacts described above, Wiseman and Lovatt have 0.9 and 0.2FTE appointments in public engagement activities respectively. Fletcher and Pine have been appointed as Impact Associates, spending all of their contracted time on impact-related activity. Page was seconded from teaching for two years to work on innovative carbon-reduction projects with businesses, and currently works 0.4FTE on the Cube Project. Wellsted, Done and CliCIR researchers have a remit of engaging full-time in applied health–psychology research specifically focussed on patient benefit. Winter's impactful



work in Sierra Leone has been directly supported by departmental travel funding and allocation of time.

- 2. Responding to strategic need. UH Psychology responded early to a realisation that NHS R&D spending should be more patient-/user-centred. With CLiCIR, we have deliberately built a large research group dedicated to health impact. Supported by the active UH Knowledge Transfer team, they have also remained responsive to business need. Our post-RAE 2008 Research Strategy set a specific goal of encouraging further KTPs, resulting in the award-winning Heales Medical collaborations. The FIT–DSD team has engaged businesses in health, financial and community settings, while Page's work with SMEs reflects responsiveness to global demand to reduce carbon emissions.
- 3. Working with charities, representative organisations, and directly with users. Impact is enhanced by a deliberate strategy of working directly with beneficiaries. CLiCIR, Troop, Winter, Kirk and Lovatt have all created impact by specific engagement with charities and similar groups. This has been enhanced by direct interaction with users, including renal groups, ERA network, Haemophilia Research Steering Group, low-income parents, and families with autism.
- **4. Letting innovation flourish**. With initiatives such as FIT–DSD, Dance Lab, Cube, etc., the unit has shown a commitment to supporting innovation. This reflects a deliberate strategy of encouraging creativity in our research portfolio, focussed on practical benefit to users.

c. Strategy and plans

We will continue to build on our strong impact record by ensuring that:

- 1. Staff are given explicit time and training (through the UH professional training and mentorship programmes) to ensure that existing/planned research realises its impact potential.
- 2. The unit's recruitment criteria will continue to be shaped such that where research-active staff are employed they should demonstrate excellence in research and actual or potential impact.
- 3. To ensure sustainability, impact will continue to be a key part of PhD training and of the DClinPsy, with several of our PhD students sponsored by impactful collaborations.
- 4. We will prioritise the continuation of existing national and international collaborations with external organisations in public, private and charitable sectors, notably with user groups.
- 5. Our communications strategy emphasises the dissemination of research in a user-friendly way to non-academic recipients, and that we offer such users opportunities to inform our research.
- 6. We will continue to support innovation in impact-generating projects of significance and reach.

In line with these principles, each of the research groups is developing plans for impact generation alongside the required research delivery plans for the post-REF period.

d. Relationship to case studies

Both cases studies come from staff (Wiseman, Fletcher and Pine) with contracts dedicated to impact-generating activities, attesting to the success of this targeted support. Likewise, both case studies showcase innovation that has a long history of development at UH. Wiseman has worked directly with the public through his high-profile mass-participation experiments. He has been innovative in his use of social media, for example, using his Twitter following of 240,000 (among the highest for a psychologist globally) as a platform to run original experiments, such as for the Royal Society and New Scientist. Pine and Fletcher's impact case study is a direct example of a KTP's impact on commerce. FIT-Do Something Different (DSD) was at the core of two successful Knowledge Transfer Partnerships with Heales Medical Ltd, recognised by the award of best KTP in South East England 2008, and shortlisted for the Lord Stafford (KTP) Award in 2009. Demonstrable impact is evidenced by Heales Medical's offering an output of one of the KTPs (called the Positive Health Improvement Toolkit) as a key part of their occupational health services, and attributing a 150% increase in the business's profits to this collaboration with UH researchers. The FIT-DSD researchers have also worked with the NHS and other agencies (e.g., National Autistic Society) to test DSD interventions for over 250 Hertfordshire families with children with autism, with results fed back to families at a special conference.