

## Impact template (REF3a)

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| <b>Institution:</b> University of Westminster  |
| <b>Unit of Assessment:</b> 4 - Psychology, Psychiatry and Neuroscience   |
| <p><b>a. Context</b></p> <p>Research in Westminster's Department of Psychology underpins a range of impacts on <b>health and welfare; practitioners and services; public policy and services; and commerce</b>, with substantive impacts beyond those described in our case studies.</p> <p>Beneficiaries in <b>health and welfare</b> include clinicians, support groups and patients. For example, <b>Golding's</b> work on motion sickness susceptibility (one of our case studies) has enabled clinicians to screen for susceptibility and prescribe appropriate treatments. This has positive effects on health and quality of life of patients with vestibular disease and others affected by motion sickness (e.g. on European Space Agency zero-gravity parabolic flights). Further impact will arise from Golding's involvement in a ongoing clinical trial (NCT00802529 at clinicaltrials.gov) comparing treatments for Meniere's Disease which has many symptoms similar to motion sickness. Other work by Golding has underpinned improved diagnostic techniques for neurofibromatosis, informing worldwide diagnostic criteria and aiding clinical decisions on surgery. Golding worked on the NFTI-QOL, a quality of life questionnaire tailored to neurofibromatosis (NF2) patients, which was recognised by the International NF2 Consensus Group in 2011 and is now used in hospitals internationally to improve patient care (e.g. all four NF2 treatment centres in the UK; Massachusetts General, USA). The NFTI-QOL has been used with <b>all</b> UK NF2 patients referred for treatment at these centres from 2010 (288 patients, 464 visits).</p> <p>Outside clinical settings, other <b>practitioners and services</b> have benefited. For example, 2011 work by <b>Swami</b> and <b>Clow</b> enabled Central YMCA (CYMCA) to design age / gender appropriate teaching material in the area of body image anxiety (which has damaging effects on wellbeing, especially among the young). The chain of beneficiaries here leads from CYMCA to teachers and then secondary school pupils. <b>Clow</b> evaluated the impact of a "Workplace Activator" intervention to increase physical activity in sedentary employees of 17 London companies during 2010-11. The findings enabled CYMCA to secure funding from the Mayor's Legacy Fund and in partnership with the Department of Health roll out the intervention to employers including Transport for London, Sainsbury's, the FIA, Guys' and St Thomas's Hospital and 16 London small to medium enterprises. CYMCA subsequently developed a Workplace Activator e-learning package based on the work, rolled out to businesses and employees across the UK in 2012. Work by <b>Buchanan</b> on online dating fraud (a serious international financial crime affecting hundreds of thousands of people in the UK alone) influenced law enforcement practice and training, criminal proceedings, and treatment of fraud victims in the UK and internationally.</p> <p>Some work also had impact on <b>public policy and services</b>. <b>Borrill's</b> 2008 findings on prisoner suicides enabled the Ministry of Justice and Border Agency to respond quickly to a government Minister's question. Research by <b>Swami</b> led to his testimony to an All-Party Parliamentary Working Group on Body Image conducting an inquiry into the causes and consequences of body image anxiety in the UK and the practical steps can be taken to address it. Their June 2012 report received much media attention and influenced both policy debate and public discourse. <b>Morgan</b> was part of the AESOP project on ethnicity and psychosis which has impacted UK healthcare policy. It was cited in several Department of Health/NHS documents aimed at shaping mental health care strategy for the future and discussed in the House of Lords (Hansard, 20th Jan. 2010; HL1047). Related work was also used as part of the evidence base for DSM-V. Our impact on policy and legislation also has international reach. Work by <b>Colwell</b> was cited in evidence to a major US Supreme Court case that resulted in a ruling that video games enjoy full free speech protections and that the regulation of violent game sales to minors was unconstitutional (Brown v. Entertainment Merchants Association, 2011). Both the US Supreme Court and the multi-billion dollar US games industry were beneficiaries; a different ruling could have negatively impacted games sales across the USA.</p> <p>Colwell's work had implications for <b>commerce</b> (the US video game industry), as did <b>Benton's</b> work with Insights Learning to produce a novel psychometric test. Marketed globally, this contributed to the viability of the company that now holds a portfolio including top global 100 Companies and has increased gross value of 15% since the project end in 2010. <b>Benton</b> also partnered PAERS Ltd to promote patient access to, and GP use of, electronic health records. An innovative user interface for access to online health records was designed and is now marketed nationwide, with further established markets in Canada and Australia.</p> |

**b. Approach to impact**

Our approach to achieving impact in the period 2008-13 has incorporated a number of different strategies, usually in combination.

A key strategy has been to **work with external non-academic partners**. Partners have sometimes helped directly with funding acquisition or supported research in other ways. In return, they themselves have become direct beneficiaries of the research and have also been able to exploit findings and act as agents of change to create further impacts on other classes of beneficiary. Influential partners have included the **UK Serious Organised Crime Agency (SOCA)** and **National Policing Improvement Agency (NPIA)** for different phases of **Buchanan's** research on romance scams (Internet Fraud case study; detailed below). Many partner organisations have health and welfare missions. A significant partner has been the **Central YMCA**, the UK's leading health and fitness charity, who were supporters and beneficiaries of two projects (body image anxiety; physical activity in the workplace) noted above. Similarly, work with the **University of the Third Age** and **Age Concern** informed older people of the importance of well-being and stress reduction for health and quality of life. This occurred through newsletters, a website, talks and dissemination events in 2008 and was based on our research findings in the area (**Clow et al**). In another example, work by **Loveday** and **Edginton** characterised the cognitive effects of hydrocephalus, a condition affecting around one in 500 children, accounting for 29.4% of paediatric neurosurgical admissions at Oxford's Radcliffe Infirmary for example. This enabled collaborating clinical teams to select appropriate neuropsychological tests. From 2009, the national Spina bifida and Hydrocephalus clinic at the Chelsea and Westminster hospital began using the researchers' recommended test to capture characteristic cognitive impairments, as well as a novel behavioural, emotional and cognitive self-assessment tool (PBEC-I) they developed. The work also influenced professional practice and outreach work at the main hydrocephalus patient support charity, SHINE (e.g. an information booklet sent to 75,000 people across the UK in 2013). A further example is **Borrill's** 2008 research on a sudden increase in suicides by foreign national prisoners in custody, following changes in deportation rules. This was directly commissioned by the Ministry of Justice National Offender Management Service and Border Immigration Agency. Within the prison service, the research provided guidance to practitioners working to manage foreign national prisoners more effectively and reduce suicide. Suicide rates among foreign national prisoners decreased the following year and thereafter.

Sometimes, **other academic partners** have been the route through which impact was achieved. In these cases, the collaborative relationship was not about doing research, but about applying research findings in specific contexts. For example, **Colwell's** engagement with a high profile external collaborator led to his research being cited in evidence to the US Supreme Court (where the collaborator testified in 2011). In **Buchanan's** research on romance scams, his collaborator acted as a conduit for research findings in her role as a consultant to SOCA and other international law enforcement agencies in the period 2010-2013.

A second strategy has been **leveraging internal mechanisms and resources to support impact**. At University level we are supported by a dedicated, proactive Knowledge Transfer Partnership unit, and access to Higher Education Innovation Funding allows ideas with high social impact to be explored via mini-grants and entrepreneurial fellowships designed to stimulate knowledge exchange activities. Some support occurs via WestFocus (a collaboration of universities in London and Thames valley) to take research through to exploitation - for example, work by **Clow** with community partners on medical decision making in the elderly. University resources have been supplemented by a School-based Business Development Officer (since 2010), working alongside School Research Development Officers (RDOs). At Department level staff are supported in research and knowledge transfer activities by inclusive and transparent policies such as targeted teaching remission that support a broad range of activities.

These mechanisms have been used to support **targeted funding applications**. Guided via our research mentoring scheme and supported by our RDO, researchers have successfully bid for funds that could be 'dual purposed', leading to both research outputs and applied outcomes. For example, **Benton's** work on psychometrics and electronic health records was supported by two KTP projects (2007-10; 2009-11) facilitated by our central unit.

We similarly used our RDO to support successful funding bids to bodies such as the Ministry of Justice (**Borrill**; work on foreign national prisoner suicides), Department of Work and Pensions and NHS (**Clow**; wellbeing projects) and Ministry of Defence (**Buchanan**; projects with

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applications in cybersecurity). Such contracts, while generating publications, are more akin to commissioned research. Impact is 'designed in' from the outset: the research is intended to inform the work of the funder or other partner.

Dissemination and engagement activities have also played an important role, and our policy of **raising awareness of our research to the general public** is valuable for generating impact. Members of the Department have done much media work, ranging from science-based programming arising from their research to light entertainment on television, radio and online (e.g. The Young Ones, BBC, 2010; All in the Mind, BBC, 2011; Bang Goes the Theory, BBC, 2012; youbeauty.com, 2012). Other public engagement included our highly successful 'Plug in Your Brain' series of free public lectures showcasing our research in 2011-13; Wellcome Collection 'Packed Lunch' talks and podcasts (2009), museum exhibitions (e.g. Natural History Museum, 2011). These activities directly impact society and culture, improving public understanding.

**Targeted dissemination talks to specific stakeholders** such as practitioner or user groups are another effective way we deliver findings to end-users. For example **Swami's** talk at the YMCA Body Image launch event in 2011 generated a contact that ultimately led to his research being considered by the All-Party Parliamentary Working Group on Body Image as well as collaboration with Central YMCA.

### c. Strategy and plans

We plan to **continue and build on the established strategies outlined above**, particularly in terms of **work with non-academic partner organisations**. Existing relationships and networks will be strengthened and new ones formed, continuing to develop impact through collaboration.

In addition, we will assign more resources to **incentivise and facilitate impact activities**. In 2013-14 the University moves to a new workload allocation model that allocates hours specifically for research. The Faculty is introducing a strategy whereby from 2015 **all research active staff will be expected to have a draft in-progress impact statement**, and we will **allocate time for impact generating activities** in the same way as for primary research.

We will further **embed evaluation activities** in future applied work, to monitor our success and provide evidence of impact. Current **planned funding applications** (e.g. for interdisciplinary work on healthy aging) build on existing strengths and are in potentially highly impactful areas. We will also **capitalise on undergraduate teaching-related outreach activities**. Through successful work placement programmes we have relationships with employers in various sectors. Some of these have already led to research collaborations; we will develop them to achieve impact in the same way as we have built relationships with other partners.

### d. Relationship to case studies

The strategies outlined in (b) supported achievement of impact. Golding's work underpinning the **Motion Sickness** case study was supported by internal mechanisms and resources (teaching remission, RDO, allocated support from research technician). Importantly, not only the underpinning research was supported, but also activities in building relationships with key external collaborators and non-academic partners. These included clinicians at Imperial College Medical School and Charing Cross Hospital, and representatives of the European Space Agency and US military. Targeted dissemination occurred to practitioner training masterclasses at the Royal National Ear Nose & Throat Hospital (2009, 2011 and 2012) and via a British Medical Journal Learning module for Continuing Medical Education training of doctors in the UK and six other countries (2011-2013).

The **Internet Fraud** case study arose from ESRC funded work on risk factors for online dating romance scams, and their effects on victims. The grant application was facilitated by internal mechanisms (teaching remission for Buchanan; support from RDO). The project convened an advisory board with representatives from the online dating industry and law enforcement (SOCA). This led to a close, mutually beneficial relationship with SOCA as a non-academic partner. SOCA and other agencies (e.g. Metropolitan Police) were thus able to act on findings very rapidly, giving impact even prior to publication. We achieved extensive public dissemination via media work, which had direct effects (e.g. victims of ongoing frauds or their relatives contacted us for advice; preventing financial loss). Targeted dissemination was achieved by a non-technical report and direct briefings. A seminar in 2011 was attended by representatives of the online dating industry and multiple Police agencies, leading to follow-up work with both sectors. With support from multiple Police forces (and the same internal mechanisms as above) we secured follow-on ESRC funding to generate further impact, and contributed to development of Police training materials.