

<p><b>Institution:</b> University of Winchester</p>
<p><b>Unit of Assessment:</b> A4 <u>Psychology</u>, Psychiatry and Neuroscience</p>
<p><b>a. Context</b></p> <p>The main types of impact generated by the Unit relate to: (A) Communication (in particular, informing processes involved in spoken and written language acquisition), (B) Society (discussion and debate on issues related to gender, sexism, advertising, body image, political belief, citizenship and identity), (C) Community (impact on community health issues), (D) Human perception (elucidating neural and cognitive mechanisms underlying spoken and written language acquisition) and (E) Human performance/human factors (influence of cognitive factors on design of technology, advertising effectiveness, performance in challenging circumstances such as diving and alcohol intoxication, and improving efficacy of police identity parades and facial-composite images).</p> <p>The main (non-academic) beneficiaries of research are:</p> <ol style="list-style-type: none"> <li>1) Those engaged in teaching or receiving language instruction in formal and informal contexts (A, E: research in the fields of communication and human perception/human factors).</li> <li>2) Members of the public and the media who are interested in the portrayal of body image in men (B: research on society's discussion of body image and gender identity).</li> <li>3) Community and government organizations involved in discussing issues such as immigration or sexism (B: research on society and identity and on sexism in everyday life, as well as C: research on sexism in countries undergoing transition to democracy).</li> <li>4) Local and community organisations involved in the field of health (e.g. local NHS trusts) (C: research on community health).</li> <li>5) Professional diving bodies (E: research on human factors).</li> <li>6) Police and other organisations (lawyers, NHS, government) interested in eyewitness memory/testimony (E: research on human performance).</li> <li>7) Discussions in the general public on the topic of beliefs in conspiracy theories (B: research on society's discussion about beliefs in conspiracy).</li> </ol>
<p><b>b. Approach to impact</b></p> <p>The Unit has engaged with national and international networks, both during the census period of the present REF and before. It has been a strategic priority to undertake research that is of direct benefit to service users, local/regional/national organisations, and research that stimulates debate and discussion of issues not commonly discussed in the wider public arena (e.g. portrayal of men's body image in the media, effectiveness of non-traditionally gendered advertisements). This strategic priority is of importance given the Unit's small size and regional location.</p> <p>Funding received annually from the University and faculty has been carefully utilised, together with finance obtained from commercial and non-HE public sources, to develop the Unit's impact. One of the main strategic goals in Psychology is to apply our research findings to real world issues. Examples of impact generated so far include:</p> <ol style="list-style-type: none"> <li>a) Research that has led to new public discussion and debate over the portrayal of men's body image (Giles &amp; Close, 2008) and sexism in everyday life (Zawisza et al., 2006), evidenced by expert commentary requested by and provided for BBC News Channel, 22 Sept 2008 at <a href="http://news.bbc.co.uk/1/hi/7625173.stm">http://news.bbc.co.uk/1/hi/7625173.stm</a> and following discussion at popular blogs such as the F Word Blog at <a href="http://www.thefword.org.uk/blog/2008/09/shocker_sexist">http://www.thefword.org.uk/blog/2008/09/shocker_sexist</a> and Law of Work blog, 28 Oct 2013 at <a href="http://lawofwork.ca/?p=199">http://lawofwork.ca/?p=199</a>.</li> <li>b) Findings that have impacted on the efficacy of eyewitness identification (Kneller et al., 2001), as evidenced by citation in The State of Texas, USA's Timothy Cole Advisory Panel's report on wrongful convictions (see <a href="http://www.txcourts.gov/tidc/pdf/FINALTCAPresearch.pdf">http://www.txcourts.gov/tidc/pdf/FINALTCAPresearch.pdf</a>).</li> <li>c) Findings that have impacted on our understanding of how an individual's cognitive performance is affected by challenging circumstances such as diving (Wilcock &amp; Kneller, 2011, see case study in this submission).</li> <li>d) Findings that have promoted more identifiable police facial composites, through research on interviewing practices, systems for creating composite faces, and methods for</li> </ol>

## Impact template (REF3a)

presenting composites in the media (as evidenced by case studies and police field trials, Frowd et al., 2010-2012). The impact has been appreciable (as evidenced by the use of Frowd's EvoFIT composite system in over 3,000 police investigations during the current REF period).

- e) Findings that have resulted in industry innovations to develop new language learning interventions (Uther et al., 2005) as evidenced by two unsolicited invitations by a large technology corporation (Sharp) to conduct user trials on language learning technologies.
- f) Findings that have raised the profile of novel interventions in language learning whose adoption has been advocated as best practice in language instruction. (Initial conference presentation by Uther et al., 2008, published as Ylinen, Uther et al., 2010, and written up in the 'Language Log' by Prof. Mark Liberman at <http://languagelog.ldc.upenn.edu/nll/?p=328>, which is a very popular blog used by linguistics practitioners—a total of 30 million viewings to date and an average minimum of 10,000 visits per day, as recorded by <http://www.sitemeter.com/?a=stats&s=sm7languagelog>).
- g) Findings from conspiracy theory research, sparking public discussion including interviews on NPR, BBC4, and the syndicated American radio programme Coast to Coast AM (Wood et al., 2012, Wood & Douglas, 2013).

The Unit's approach throughout has been to base all impact activities on the results of traditional academic research as published in monographs, chapters and peer-reviewed journals, but steering outputs to apply to real-world settings. The Unit is aided at the institutional level by the staff development unit, which supports impact from research via network and public engagement skills training.

At an institutional level, the Research and Knowledge Exchange (RKE) Centre of the University supports staff through the Enterprise Lecture scheme which allows staff and students to hear and collaborate with inspirational speakers with an entrepreneurial and applied focus to their work.

The University has a consultancy incentive scheme, which permits up to 50% of funds raised through consultancy to be returned to the staff member (e.g., to support further research and knowledge exchange activity). This scheme has already proved valuable in enhancing the work of several members of staff.

### c. Strategy and plans

The Unit's strategy for growth and development revolves around a commitment to broadening impact along several different avenues. An important strategic aim is to become a regional, national and international leader in applied research, partnering with a range of organisations, and running diverse applied research programmes that achieve national and international excellence. The following are our strategic priorities:

- i. To encourage the development of further partnerships with local police, government and community organisations to conduct research and knowledge exchange projects. This also includes expanding the reach of current projects (e.g., impact of diving, men's body image portrayal, gender and advertising, savings and fiscal behaviours, police composites and identity parades, language acquisition techniques).
- ii. To strengthen existing partnerships with the local NHS, and to develop new ones.
- iii. To provide additional research-related incentives (e.g., internal match funding for external income) for researchers to further engage in consultancy and knowledge exchange projects with businesses.
- iv. To expand the reach of the EvoFIT facial composite system (the majority of police usage of EvoFIT has been within the UK, but it has also been adopted in the US, the Middle East, and Eastern Europe), along with techniques which benefit identification of composites from any system. This includes strategies for interviewing, enhancements to traditional approaches for face construction, and methods for improving recognition of finished composites (e.g. when used in a police appeal for information). Considerable emphasis is and will be placed on wide dissemination of techniques, to achieve maximal uptake, in the UK (as evidenced recently in a police workshop, Univ. Leeds) and overseas. UoA staff are exploring whether these techniques are effective in other applied domains (e.g. identity parades, identification of missing persons, reconstruction of human skulls); if so, similar dissemination is planned.
- v. To develop new networks to engage non-academics and, in particular, forensic practitioners (e.g., South East Eyewitness Network).

Given the above, the following are targets for the Unit over the next 5 year period:

- a) Substantially grow income from consultancy and knowledge exchange contracts to £75k per annum (currently estimated at £35k for the 2012-13 academic year).
- b) Attract further income for research studentships (PhD and summer bursaries) with income from industry and other organisations working in applied settings.
- c) Encourage further collaboration, both internally and with local organisations (profit and not-for-profit)

It is also proposed that the current areas of impact be further expanded and explored to include:

- a) Investigating influence of alcohol, which holds particular relevance for driving behaviour (spatial attention work of Bayless), identity parades (Kneller) and creation of facial composites (Frowd).
- b) Improving our understanding of the impact of weapons on witness memory (Kneller, Frowd).
- c) Students' learning (education and academic performance) (Prat-Sala).
- d) Techniques for designing user interfaces for mobile maths learning applications (Apps) (Uther).
- e) Developing guidelines for portraying mental health issues in television drama (Giles).
- f) Developing research-informed guidelines for marketing and advertising in industry with respect to fiscal behaviour, and the use, effectiveness and effects of gender-traditional advertising (Zawisza).
- g) Developing research-informed guidelines for international policy-makers on reducing sexism cross-culturally (Zawisza).
- h) Promoting transparency and public engagement to counter the spread of conspiracy theories (Wood).

#### d. Relationship to case studies

The selected case studies are (1) Contributions of research media psychology to discussions of body image in society (**Giles**) and (2) Cognitive performance under challenging circumstances (**Kneller**). The first case study developed from 2008 as a result of work in the Unit on issues related to society and gender. David Giles and Jessica Close's (Univ. Coventry) landmark paper on Personality and Individual Differences identified a significant relationship between the portrayal of a 'muscular ideal' in men's magazines and readers' own efforts to attain a corresponding body shape (which included the use of steroids). These findings have been widely reported in the media. The second case study developed from a history of the Unit working on issues related to applying knowledge about cognitive processes in settings which are considered 'challenging'. The work has been particularly useful from the point of view of cognitive performance in diving, with potentially crucial considerations from a safety perspective. Similarly, the Unit has strong links with police forces, and the work on eyewitness testimony has been influential in informing police practice of the way in which identity parades are conducted as well as a range of procedures used by police for constructing and recognising composite images.

Within our case studies, we are delighted to see fruition of an impact strategy that aims to develop relationships with organisations to conduct research and knowledge exchange projects (e.g. work by **Kneller** with professional diving bodies and police forces). These strands complement other research approaches in the department—for example, on the effects of alcohol use (**Bayless**), composite images (**Frowd**) and language processing (**Uther**). The strategy for encouraging researchers to engage with the public to generate societal discussion is also important (**Giles** on the portrayal of men's body image, **Zawisza** on the use, effectiveness and effects of gendered portrayals in advertising as well as on sexism in everyday life). There is also a strategy to see direct benefits to service users (e.g. language learners and teachers) in **Uther's** research and crime victims in eyewitness testimony situations (**Kneller**). There is clear evidence of strategy for expanding the application of applied research (e.g. through recent strategic appointments of **Frowd, Gray, Uther and Wood**), benefiting current and future REF returns.