Institution: Bournemouth University (BU)
Unit of Assessment: UOA4
a. Context

Psychology at BU is essentially a new unit, established in 2008. Although the time available to achieve impact was limited, it provided a unique opportunity to build our strategy from the ground up. We adopted a simple guiding principle: publicly-funded research should be of value to the public. Consequently, we have an obligation to demonstrate that our work has meaning and relevance to current issues of public concern. Our **cognitive science** team has interests in potential constraints on human effectiveness (e.g. dyslexia, prosopagnosia, wayfinding, decision-making). Similarly, our researchers in **health and wellbeing** address critical contemporary health issues (healthy and unhealthy eating; depression; cancer; post-traumatic stress disorder (PTSD); maintaining health in old age; abnormal ageing). As shown below, *the beneficiaries* of our research include a diverse range of audiences and user groups, including **the general public, health practitioners and service users, educational service providers and users, government and public services, charities,** and **private sector organisations**.

Types of impact

   Practitioners and services. Clarke's applied research programme, conducted within an NHS trust, contributes to the amelioration of major psychiatric problems. This programme is collaborative with service providers and incorporates input from service users, substantially increasing the reach of her work. Similarly, **Nyman's** falls prevention research has led to the formation of the *Dorset Falls Alliance* with *Osteoporosis Dorset*, bringing together regional agencies and hospitals to improve strategies that reduce the likelihood of falls amongst elderly people.

   Improving engagement with services. Williams' work on the reluctance of people with eating disorders to acknowledge their difficulties is being applied to the design of internet resources to engage potential service users and bring them together with care providers, including a regional *NHS* clinic and a relevant charity (*i*eat*).

   Public policy and services. Our research is generating policy implications. For example, **Clarke** served on the Expert Reference Group that produced the core competence framework guiding clinical standards for national training for staff treating people with a personality disorder.

   The built environment. Wiener's *Wayfinding Research Centre* (WRC) has provided research-based consultancy on the planning of wayfinding aids, with significant impact in both public service settings and in privately run facilities. For example, the Centre's NHS involvement has had *economic impact* in improving public services; its work at Frankfurt Airport has had *commercial impact* by increasing the effectiveness of existing businesses (see Wayfinding Impact Case Study).

   Society and education. Bate's *Centre for Face Processing Research* (CFPD) has developed innovative assessment and treatment programmes for developmental prosopagnosia that have attracted international media attention, leading to significant advances in the social recognition of the problem. Likewise, **Kirkby's** research on eye-movements in dyslexia and **Parris'** work on attention deficit hyperactivity disorder (ADHD) have influenced educational and support services responsible for the remediation of these socially handicapping problems.

b. Approach to impact

At the heart of the current (2012-18) BU Plan is an annual investment of £3 million to support activities that fuse research, education and professional practice. BU has supported public engagement initiatives; trained researchers in knowledge exchange; assigned research officers to oversee knowledge transfer initiatives; and facilitated consultancy work and joint projects through the provision of legal and writing support. As a department, we combine ***broadcasting methods*** to draw in our research audiences, and ***narrowcasting methods*** to engage specific groups of non-academic users in research-based practice. Examples of these approaches and evidence of their effectiveness is provided below.

Broadcasting

   Using open invitation events and media: Impact through public engagement. It is axiomatic to us that the general public should be kept informed of the research that it supports. We have played major roles in *BU outreach events* to raise public awareness, develop local networks, and catalyse collaborative work (e.g., *Psychology@BU, 2009; The Festival of Learning, 2013; Eating Disorders Week, 2013*). We make effective use of institutional resources to ensure

that our best work gains the widest possible audience. For instance, when **Bate** established CFPD, the BU Communications Office ensured that her work was widely reported at home and abroad. Public awareness of prosopagnosia has greatly expanded the pool of research users, creating the context for further advocacy through parliamentary and NHS lobbying (see Face Processing Impact Case Study for further details).

Using the WWW to reach key stakeholders: Impact through direct contact with research users. We recognise the increasing value of the internet in the direct delivery of research-based resources. Therefore, we support the creation of websites to bring our research to specialist user groups, to provide advice and information based on our findings, and to deliver change for the public good. For example, patient empowerment in healthcare settings is central to our wellbeing research. **Bate** uses her website, www.prosopagnosiaresearch.org as both the portal for people who have encountered CFPD's work in the media, and as the only UK access point for the screening and diagnostic services. Likewise, **Williams** is developing a dual-purpose (data-gathering/guidance-providing) website with and for people with lived experience of eating disorders. In the cognitive science domain, **McDougall** obtains user data directly via the http://microsites.bournemouth.ac.uk/signage/ website. This allows her to contribute to the development of universal standards of symbol comprehensibility for the International Standards Organisation (ISO; Standard 9186-3).

Narrowcasting

Building partnerships with NHS staff: Impact through work with health practitioners. A close partnership between BU and local hospitals was formalised in 2009 by the creation of the Dorset HealthCare University NHS Foundation Trust, as part of which BU supported a 0.6FTE secondment from the NHS (**Clarke:** Cat C) to coordinate mental health research between the Trust and the University. As a result, NHS staff have been recruited as co-researchers on pump-primed psychology projects that afford opportunities to access external funding, particularly through the *National Institute for Health Research*. These include initiatives for people experiencing clinical problems such as eating disorders (with **Williams**), PTSD (with **Wiener**), depression (with **Thomas**), and post-partum depression (with **Gosling**). **Clarke** has made links to service user groups (e.g. the *Dorset Mental Health Forum*), and has accessed *NHS Portfolio Funding*, enabling additional support for staff research (e.g. in the disorientation sequelae of PTSD, with **Wiener**). As both a researcher and a national trainer in new cognitive therapies, **Clarke** has run many professional skills workshops that affect the daily practice of mental healthcare staff. Finally, the NHS has co-funded several studentships that, through better understanding of patients' experiences, impact directly on service improvement (e.g. amelioration of PTSD in cancer patients; effects of chemotherapy on patients' prospective memory; wayfinding in dementia patients).

Creating working partnerships around a commonality of interests: Impact through engagement with charities. Where possible, we have involved the charities and self-help groups that are our audiences as active research stakeholders. We develop common cause with these organisations and this offers appropriate, bespoke pathways to impact and it may fund new research initiatives. For example, (a) **Williams'** research on eating disorders has resulted in a close relationship with the charity *i*eat*, with whom she is jointly developing and evaluating interventions; (b) Because PTSD is known to cause wayfinding problems, **Wiener** (WRC) was able to develop a collaboration with *Army of Angels,* a charity supporting injured armed forces personnel. (c) **Bate** is supported by the *Encephalitis Society* and *Headway***,** both of which fund distribution of research-based information to members affected by face blindness. Likewise, when **Cole** (Visiting professor) and **Bate** showed that Möebius Syndrome — a hereditary form of facial paralysis — can result in face recognition impairment, the *Möebius Trust* offered its active support to CFPD. Additional bridging partnerships have been formed with the following charities: *Samaritans; Barnardo's; First Point; Care Farming UK; Dorset Mental Health Forum; Agoraphobic Link Line*. Finally, we have worked with charities to establish specialised self-help groups. For example **Parris'** interest in cognitive control, arousal and reward in ADHD led to his launch of an *Adult ADHD Support Group* in collaboration with *Dorset ADHD*.

Building links through training: Impact through engagement with educational service providers. Where our research touches educational issues, we fund training for parents and education professionals to develop research-based practice and, wherever possible, we involve them as stakeholders. For example, **Taylor's** research on cyber-bullying led to a series of

workshops for parents and teachers on the risks associated with social networking. **Mayers** followed a similar route to communicate his research on parental management of children's sleep. Finally, **Kirkby** recently extended her laboratory work on dyslexia and is now working closely with teachers, special educational needs teachers and educational psychologists to pinpoint how working memory limitations affect classroom note-taking.

Offering consultancy services: Engagement with public services and private enterprise. We have developed consultancy services relatively cautiously, and with the primary aim of creating long-term research partnerships based on sharing expertise, rather than gaining a short-term income boost. For example, **McDougall's** expertise in the semiotics of signs has led to an advisory role in developing ISO sign standards and to consultancy with *McNeil Consumer Healthcare* via *Pinney Associates*, reviewing work that informs signage on medical packaging.

c. Strategy and plans

Our strategy is designed to ensure that our research is solidly grounded in theory, and that its findings can be systematically and meaningfully applied for the common good. We have therefore identified aspects of the work of both of our research groupings where, supported by new appointments, we intend to develop or extend impact by 2020. These are: Health and Wellbeing: eating healthily, dementia and falls in older adults, children's sleep; Cognitive Science: face recognition, wayfinding and signage, reading in the classroom. Our goal is to ensure that work within each of these six research themes achieves high-quality, well-documented impact. This will involve long-term engagement with stakeholders to produce demonstrable public benefit, including evidence of influence on practice and/or policy at national and international level.

Research Impact Plan: The Psychology Research Committee has already formalised its five-year research impact plan designed to maximise the significance and reach of our work. It builds on the interdisciplinary links arising from BU's new Research Themes (in which we feature strongly) and from cognate disciplines that are directly concerned with cognition and healthcare in (respectively) the *School of Design, Engineering and Computing* and the *School of Health and Social Care*. The narrowcasting and broadcasting methods, used so successfully to date, will continue alongside the mechanisms described in RA5 (Section 3.3) to support staff in achieving impact. We are also launching the following strategic initiatives at group and individual level to support the delivery of our impact plan.

Group Level: Oversight of impact. Working closely with our Research Committee, a senior member of staff will have the specific role of overseeing progress against agreed targets, collating impact evidence for an annual report and mentoring staff towards achievement of personal impact. In 2014, we will convene an independently-chaired ***Research Advisory Panel (RAP)*** of senior representatives of our research stakeholder groups. The RAP will audit our annual report, offer advice in terms of future research direction relative to members' fields of expertise, and strengthen our research networking activities, for example regarding contract research, commercial consultancy and KTP-funded fellowships. Thus, RAP will contribute to future strategic developments.

Individual Level: We are currently developing the ***Progressive Impact Check-up Kit (PICK)***, an online self-assessment tool to (a) help staff to monitor their progress systematically against defined impact criteria, and (b) direct them to available departmental and university support (e.g. training, funding). PICK will be used in combination with the BU Researcher Toolkit. We will also recruit senior researchers working in regional multidisciplinary teams that deliver effective innovation to act as ***staff mentors*** (currently **Clarke**; **Cole**; **Innes** (BU Dementia Institute).

d. Relationship to case studies

In 2008, we appointed several excellent researchers who had (a) the capacity and drive to maintain the momentum of their ongoing research programmes in a new academic context, and (b) a profound interest in translational research. In addition to providing the standard support for ECRs, we backed **Bate's** and **Wiener's** programmes with major investment, facilitating the launch of research centres that could rapidly develop applied portfolios based on sound theoretical underpinnings. Their research achieved impact by taking advantage of interdisciplinary connections, making partnerships with relevant charities, using media interest skilfully, and establishing websites to foster and extend links with stakeholders. The outcomes obtained to date validate the guiding principles underlying our approach to impact.