

Institution: University of Hull

Unit of Assessment: A4: Psychology, Psychiatry and Neuroscience

a. Context

Psychology at Hull engages in both fundamental and applied research within three broad themes: (i) Cognition: Sub-groups include cognitive development, learning, memory, and social cognition; (ii) Cognitive & Clinical Neuroscience: Sub-groups investigate how complex mental functions are implemented within the brain, and how these cognitive functions decline with degenerative diseases. Included are groups working on social neuroscience, neuropsychological assessment in cognition, and dementia/clinical related research; and (iii) Health and Applied Psychology: Including groups working on health and wellbeing, and applied psychology such as mental toughness in life skills.

The Strategic Plan of the University of Hull describes its role as an anchor institution to regional communities. Local challenges have provided much of the impetus for the department's national and internationally directed research. Our main non-academic user groups are: schools and patient groups in the local community; local and national sports and businesses enterprises; educational policy makers nationally. The Department's impact extends to international sport, education and the European legal system.

The city of Kingston upon Hull, once a thriving commercial and fishing port, was already suffering economically before its decline was hastened by the Anglo-Icelandic Cod War of 1975–1976. Recent data from the Central Statistics Office indicate that it is the 10th most deprived region in Britain (2010), having deteriorated further since 2007, when it was 11th (Communities & Local Government, 2011). With the re-organization of health provision (Health and Social Care Act 2012), the region's health challenges have become more apparent. As in the rest of Britain, addiction, dementia, coronary heart disease and obesity are of primary concern, but these are particularly acute in the region - in each case the risks in many areas are some 50% higher than the national average. Challenges arising from family structure (e.g. 16,700 children in poverty, high incidence of young single parents), lifestyle (alcohol, diet, substance abuse, etc.), and deprivation (low educational attainment, lack of employment opportunities and lower incomes) compound these health risks, in a 30 year pattern of decline and deprivation (Department of Health Profile: Kingston upon Hull, 2012).

The rapid decline of what was once a thriving maritime economy, have been major concerns of significant figures in Hull's Psychology past. Thomas E. Jessop, OBE, Professor of Philosophy who taught psychology, recently described as one of 'the ablest minds in Methodism' (see Yates, T., (2011), Pioneer Missionary, Evangelical Statesman: A Life of A T (Tim) Houghton, p. 81), was awarded an OBE for his outreach educational work with British forces; the work of Alan Clarke, CBE (Chair from 1962-1984), the first Professor of Psychology and former President International Association for the Scientific Study of Intellectual and Developmental Disabilities, reshaped thinking with regard to the notion of fixed IQ, dealt with the issue of 'pseudo feeble-mindedness' (i.e. false negatives on original testing) and demonstrated that people from adverse and deprived backgrounds could recover with major increases in IQ in their late teens and twenties; Martin Crawshaw (former marine engineer), who took over administration of an MSc in Industrial Psychology in 1984, formulated the Occupational Psychology standards for the British Psychological Society; and David Bartram, former President of the International Test Commission (Chair in Psychology and Dean of Faculty until 1996 on becoming Research Director at Saville & Holdsworth, world leaders in psychometric testing).

These early-established themes of education, overcoming disadvantage, and the rigorous assessment of functioning, are echoed in the evidence of impact we provide for REF2014, reflecting Hull's enduring commitment to address two significant challenges to social and economic progress: the acquisition of basic literacy skills, and development of the resilience which enables individuals to achieve significant life goals in adolescence and adulthood.

b. Approach to impact

Approach to impact

Our main initial gateway to external contacts is the University's improved website. The University's Enterprise Centre helps to identify and coordinate impact activities. The Faculty of Science and Engineering and the University have combined research and enterprise committees to

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help engender cross pollination of ideas. The faculty has just appointed an Associate Dean of Engagement to enhance links between the department and the centre. There is a PVC of Engagement to help provide a strategic overview.

Clough is the department's Director of Enterprise. Part of this role is to monitor the impact implications of the departments' research and help to enhance related activity. The impact of research is at the core of many of our research discussions. Contacts and externally directed research ideas are coordinated by the Enterprise Director to develop an end-user informed research strategy. Third year UG projects often make use of our existing links and help generate new ones.

The department runs workshops on impact enhancement, with special emphasis on research funding such as KTP's. Impact activities are discussed in appraisals and targets set.

The department has a strong network of end user contacts in the fields of health, sport, and business and education (in addition, students provide an excellent bridge into the local community, working with the police, local schools, MS carers, local TA units, etc.):

Health: At the beginning of this assessment period the Psychology Department's *Centre for Health and Clinical Neuroscience (CHCN)* was set to yield substantial impact as a result of liaisons with local hospitals and potential research collaborators in the University's recently launched Hull York Medical School (HYMS). The department focused on developing impact through (a) identifying areas of expertise and potential impact of key staff, largely in relation to clinical neuroscience (b) developing the on-site clinical research centre and investing in related laboratories (c) linking with a larger scale University development (HYMS), and (d) developing and maintaining links with the local health service, hospitals and clinicians, through personal contact, formal presentations and joint appointments.

Changes to over half the researchers in the department during the assessment period, including some who were pivotal to the original plans for the CHCN, have influenced investment in the newer Health theme within the Health & Applied research group. However, the clinical neuroscience theme remains important: the department is currently in negotiations for funding to reinstitute dementia assessments, and has developed close working relationships with the NHS through the Research & Development lead and the Directorate for Mental Health and Learning Disabilities, Hull NHS. Negotiations with the local NHS R&D lead resulted in an award towards refurbishment of the CHCN as part of a contract to carry out research into the lack of GP expertise in diagnosing dementia, which leaves 57% of sufferers undiagnosed (Alzheimer's Society, 2012). This award provides an important first step towards National Institute for Health Research funding. Reid's work on diabetes maintains our link with the Hull York Medical School.

With respect to potential impact from health-related work: Kirsch, now Emeritus Professor of Psychology in Hull, carried out much of the research and advocacy on the placebo effect and use of antidepressants which shaped National Institute for Health and Clinical Excellence (NICE) guidelines on antidepressant prescribing and the treatment of depression (2009). [Note, we are not using Kirsch's work as a case study because he has been employed by the University of Plymouth on a part-time basis since 2011]. Much of Kirsch's research on expectancy theory and the clinical use of hypnosis, while employed by Hull (2007-2011), has considerable real-world implications. With departmental colleagues, he has published fMRI evidence that hypnosis engenders physiological effects on the brain, resulting in interest from clinicians, researchers and the general public. The Cognitive & Clinical Neuroscience group have investigated the efficacy of anti-dementia drugs, adopting a sophisticated method employing neuroimaging markers which has impacted on the design of clinical trials

Clough is developing a proposal with the Welsh Government regarding: Smoking cessation (a priority target in Wales this year); Weight reduction and weight management – especially overweight pregnant women where there is a significant health hazard; and Rehabilitation from sports injuries.

Education: In collaboration with educational psychologists in North Yorkshire, Johnston is examining the phonic problems of children who failed the government test, the Phonics Check, by administering a more diagnostic phonics check. Education is one of the threads related to mental toughness and its development in adults and children. The MTQ48 has found worldwide application outside academia, and is having an impact on performance in education, sport and business. Clough is piloting work with the MTQ48 in teacher training selection; and working with a local college (Wilberforce) to introduce mental toughening to their GCSE maths teaching.

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Sport: The department has worked with local and national rugby teams. Clough is working with the Polish Winter Olympic team to develop and measure mental toughness.

Business: Clough and colleagues are working with large local businesses, for example Vivergo and Novartis, to enhance their performance.

Evidence of successful interactions with end users is included in the impact case studies. Letters of support and case studies are available, as are media reports. In addition, much of this end user work appears in our applied publications. The long term nature of many of our contacts is testimony to their success.

c. Strategy and plans

We believe the impact cases studies reflect excellent research, the value and usefulness of which has been recognized beyond the psychological research community. For example, our current impact cases are a subset of those that might have been submitted had staff not changed, as touched on in Section b above.

A common theme that helps to sustain continuity in impact is our focus on Hull’s social problems. To this end, while maintaining research groupings typical of other research active psychology departments, researchers at our 2013 research away day considered a programme of projects related to regionally relevant research requirements, such as wellbeing, healthy living, resilience and remediation, proficiency, attainment and learning, many of which link directly to broader University research themes.

Along with advice from the Director of Enterprise, project groups will be lead by an experienced researcher, whose role will include the perusal and maintenance of relevant regional links with research stakeholders, the most active of whom will participate in a Departmental Research Advisory Group, and represent the activity within broader university research themes and beyond. Knowledge Transfer Partnerships (KTP), which are well supported by the University’s Knowledge Exchange operation and local businesses (public and private sector links) will be our initial research funding target, as well as seeking more strategic research funding support from relevant research councils, NHS and the charitable sector.

d. Relationship to case studies

Two of the Impact Cases we have submitted to REF2014 reflect Hull’s enduring commitment to addressing significant challenges to social and economic progress: the acquisition of basic literacy skills, and development of the resilience which enables individuals to achieve significant life goals in adolescence and adulthood. These impact case studies are, in effect, those which have survived staff changes over the REF period. These reflect the sustained activity of Johnston and Clough who have been continuously employed by Hull for the past decade, working in areas in which Hull has been active for substantially longer than that. Although routed in local challenges the research has national and international implications. Just as Johnston’s work is influencing government education policy, and has led to a successful implementation of the method in India, so is Clough’s influencing social challenges: In 2012, the All Party Parliamentary group wrote a report – Seven key truths about social mobility – which concluded that personal resilience and emotional well being are the missing link in the chain. The group recently (2013) held a Character and Resilience summit, citing Clough’s work as part of the evidence trail.

Mazzoni’s work in support of the Italian judicial system reflects the international mix of academics in the department, and together with Clough’s and Johnston’s work, reflects an international aspect to our impact.

For the future, we have learned, particularly from Clough’s case study, the importance of routinely incorporating methods to amass evidence of impact as projects proceed and after they have ended.