

**Institution:** University of Strathclyde

**Unit of Assessment:** 4 Psychology, Psychiatry and Neuroscience

**a. Context**

Our approach to research with impact can be seen in the work of all three of our research groupings. The Health and Behaviour Change group has carried out translational work on alcohol and drug addiction, safety in the nuclear and rail industries, coping with long term disability and prevention of suicide and self-harm. The work of the Developmental and Educational Psychology grouping has impacted on road safety education, prevention of bullying and the diagnosis of language impairment. The research of the Cognition group is impacting on stroke rehabilitation and has resulted in a number of successful collaborations with industry. Among the beneficiaries of this work have been government departments, the NHS, local education authorities, the rail and nuclear industries, the police, and charities. Our approach to translational research is integral to the culture of Psychology at Strathclyde, reflecting the University's founding mission of being a 'place of useful learning'. Our approach also aligns with a key element of the University's strategic plan, which is to ensure the successful exchange of knowledge with external organizations including business, industry, and both the public and third sectors.

**b. Approach to impact**

Strathclyde Psychology has had an impact strategy embedded successfully in our processes for almost 25 years. Our work has focused on developing theory and generating findings that have informed practice in education and training, healthcare, and operating practices in industry. Our long history of working closely with a wide range of organizations at the level of both policy and professional practice to deliver effective change is based on three guiding principles: developing translational units, making strategic appointments and developing staff to aid our impact, and encouraging proactive engagement with potential users. The University's strong commitment to translational work provides both a context and support for the strategic application of scientific advances.

**Translational units**

As part of a longstanding orientation towards impact assessment, Psychology at Strathclyde has a tradition of integrating 'translational units' into its research profile. The Centre for Applied Social Psychology (CASP), the Centre for Research into Interactive Learning (CRIL), and the Road User Group were our original translational units. Their success is evidenced in the case studies that form part of this submission; the Kerbcraft road crossing programme and the development and implementation of the Confidential Incident Reporting and Analysis System for the railway industry were delivered via the Road User Group and CASP, respectively. Learning from the success of these activities, Psychology at Strathclyde has made translational research a central focus of activity within our research groups: Cognition, Developmental and Educational Psychology, and Health Psychology and Behaviour Change, as outlined below. Our research in these areas continues to be directed to its application to policy and practice in response to the real-world problems of our partners the NHS, education and industry.

**Staff development and strategic appointments**

Sharing the impact of our research with non-academic stakeholders has become a significant component of the annual Accountability and Development Review undertaken by all staff; this review is an important source of information for staff promotion and training and development requests. This formal valuing of knowledge exchange activity enables staff to use their time to engage effectively with external organisations. For example, as a result of this strategy, the health psychology expertise in the Unit has been delivered to the Health Directorates in the Scottish Government. This substantial project produced a competency framework for staff delivering behaviour change interventions that is now used by NHS-Health Scotland as the basis for training NHS staff across Scotland.

The University offers regular staff training events in the area of knowledge exchange. Psychology staff have access to a full training programme that is designed to directly support and align with the strategic ambitions of the University for research and knowledge exchange enhancement through increased collaborations and international partnerships, leading to improved research and knowledge exchange performance. When making strategic appointments, Psychology has made use of a new Knowledge Exchange career pathway at Strathclyde. Post holders are knowledge exchange leaders who manage a range of high value knowledge exchange programmes and associated research activities. Using this pathway, Psychology has recently appointed Adair to the post of Director of Behavioural Medicine to progress our research impact in health and expand our contribution to the Health Technologies theme within Strathclyde's Technology and Innovation Centre.

#### **Encouraging proactive engagement with potential users.**

Psychology also has a Knowledge Exchange Champion (Butler) who identifies knowledge exchange and impact activities that are appropriate for our research portfolio, recognising that different impact types may be more appropriate for some individuals and research groups than others. This staff member shares best practice on impact activities, including dissemination of new opportunities and mentoring of staff developing nascent impact activities. As a result of this a number of successful collaborations with industry have been developed since 2008. For example, PsyKE is engaged in projects with internal partners (Electronic and Electrical Engineering, Centre of Excellence for Signal Image Processing) and external organisations (University of Glasgow Sleep Centre, the commercial company Brookes-Bell, and the mental health charity Action on Depression). Funding for the projects has come from Scottish Sensor Systems, Brookes Bell and the Scottish Funding Council. Members of the Cognition group are setting up projects in connection with two commercial businesses, Inception Ltd. and Robertson Packaging. Members of the Health and Behaviour Change group have been encouraged to deliver their science to governments at both Westminster (Elliott, Department of Transport) and Edinburgh (Dixon, Health Directorates and NHS Health Scotland). This group has also developed strong ties with the third sector. For example, the group is working with the Scottish Stroke Knowledge into Action Community and hosts Communities of Practice for mental health and physical activity after stroke. Educational and Developmental Psychology research has also impacted on NHS diagnostic and treatment strategies, such as the discovery of neuropsychological predictors of both clinical improvement in ADHD and stimulant treatment response (Rhodes) and effective language interventions for children with language impairment (Boyle).

#### **University structures and support mechanisms**

The University's Research and Knowledge Exchange Services support our translational work in areas such as development and protection of IP, tendering for project funding, management of contracts, establishment of spin-out companies and engagement with external organisation and strategic partners. Psychology also benefits from knowledge exchange services at Faculty level. These services provide professional support for the development and marketing of CPD events and administrative support for consultancy work. Recent use of these services by Psychology has supported the development of the Psychology Knowledge Exchange and Enterprise (PsyKE) initiative; a commercial venture using state-of-the-art eye tracking technology with quantitative and qualitative testing methods to examine human-human and human-technology interactions. PsyKE operates within both the Health Technologies and Human and Social Aspects of Technology themes within the Technology and Innovation Centre. The Technology and Innovation Centre is the University's single biggest investment in research capacity, supported by Scottish Enterprise and the Scottish Funding Council. This major initiative will provide shared access to research space to support and foster close partnerships between the University, industry, and the public and third sectors.

These structures have supported projects of substantial scale and significance such as:

- The development of a Language Intervention Programme for primary-school children with persisting developmental language disorders that has impacted on professional practice and is now being used in schools in the UK.
- The development and dissemination of school-based counselling in all secondary schools in Wales and Northern Ireland, giving over 10,000 young people the chance to talk to a trusted

## Impact template (REF3a)

and professional adult about their psychological distress.

- The development of ‘treatment manuals’ for Person-Centred Counselling, which have contributed significantly to the competence frameworks and National Occupational Standards that are constituent parts of a programme overseen by the Department of Health.

### **c. Strategy and plans**

Our plans for developing future impact centre on learning from our past successes and applying our knowledge and experience to new ventures. Our goal over the next five years is to develop the translational activities which are now embedded within our research groupings. To this end, we have already developed an effective strategy for supporting staff, appointing knowledge exchange specialists, and accessing knowledge exchange funding streams.

#### **Support for staff**

i) Research Leave System. Psychology has a research leave programme that requires staff to produce a business plan for the sabbatical period, which in addition to demonstrating significant potential to deliver research of international excellence, is also required to address the potential for translation. ii) Knowledge Exchange Training. The School will continue to resource staff to enable them to participate in the University’s extensive portfolio of knowledge exchange related training. The focus on knowledge exchange in the annual Accountability and Development Review will continue to support and encourage staff to translate their research into knowledge exchange activity.

#### **Appointing knowledge exchange specialists**

Knowledge exchange is now integrated into the business plans for the resourcing of strategic appointments into Psychology and this practice is set to continue. The recent appointment of a research-led knowledge exchange Director to support the progression of knowledge exchange activity within the Health Psychology and Behaviour Change group is an example of this and our plan is to consider similar appointments for our other research groupings.

#### **Accessing knowledge exchange funding streams**

Central to our strategy and plan for the coming years is a continuation of our involvement with the knowledge exchange ventures and funding opportunities made available by the University and Faculty. Examples of these that have benefited the Unit during the REF period include:

- The Strathclyde Knowledge Transfer Account (EPSRC funded, £2.6M), which has been used to enable, accelerate and enhance links with industry through partnership research programmes, secondments, studentships, and the creation of new start-up businesses.
- The West of Scotland KTP Centre (located on-campus), which is the largest centre of its kind in Scotland and works directly with companies to understand their research needs.
- The Strathclyde Links programme, which is funded by the Scottish Government and European Regional Development Fund to help small businesses access University research and consultancy services by facilitating introductions, providing support and funding, and providing networking opportunities.

### **d. Relationship to case studies**

The two case studies we have chosen as examples of our translational work demonstrate both the ethos of our approach to impact and the strategies and support that have been used to achieve impact. In both case studies, the approach to developing impact was to follow through academic research which had implications for policy and practice and then proactively start a process of engagement of knowledge exchange with non-academic users. A variety of University mechanisms supported this translational work throughout. With the Kerbcraft project this was especially helpful in relation to issues concerning IP, the tendering process, and in regularly providing funding through the Research and Development Fund both to bridge the gap between projects so that research staff could be retained, and to pump-prime new projects. Similarly, the Centre for Applied Social Psychology was assisted by the Research and Knowledge Exchange Services unit in establishing the Human Factors spin-out company which was integral to the development and implementation of the Confidential Incident Reporting and Analysis System for the Railway Industry.