

#### Institution: Abertay University

# Unit of Assessment: 04 Psychology

**a. Context** – Applied psychological research at Abertay is predominantly conducted by 3 research groups of which 2 are multidisciplinary in makeup. Each group has a translational focus in their activities by collaborating with non-academic partners, and can evidence non-academic impact in both national and international contexts.

Abertay psychologists contribute to The **Investigation**, **Security**, **Policing and Intelligence** (**I-SPI**) **Group** - a multi-disciplinary grouping that has produced– research which has led to important changes in the way some UK and international police forces collect statements from eyewitnesses to crimes (see Impact Case Study 1: SAI). Research into the interviewing of vulnerable child witnesses is having an effect on police interview procedures in a number of international jurisdictions (examples are outlined in Section b). Collaboration with the aviation security industry is influencing airport operators, with some contemplating changes to the way they screen candidates for X-Ray operative positions. In addition, UK and international forensic mental health services are using tools developed and validated by I-SPI researchers in the treatment of offenders with intellectual disabilities (See Impact Case Study 2: QACSO).

The **Whitespace Group** is a multi-disciplinary grouping of psychologists, vision scientists, sociologists, and computer animators who have worked with NCR Financial Solutions, to develop a programme of research that implements creative and animated solutions to problems associated with display technologies – like *next generation* automated touchscreen technology. In a tie up with a computer games company, Quartic Llama, the group has developed a proof of concept app for promoting e-inclusion and visual rehabilitation in patients with age-related macular degeneration.

The **Evolutionary and Biological Basis of Behaviour (EBAB)** Group has collaborated with the innovative mental health charity Penumbra on a Technology Strategy Board - a Knowledge Transfer Partnership funded project that has improved the way health workers monitor mental health recovery in the population (I.ROC -Individual Recovery Outcomes Counter). **EBAB** group members are part of the Scottish Primate Research Group (SPRG) and have an association with the Living Links project, a Scottish Funding Council Funded (£1.6M) collaborative project between SPRG and the Royal Zoological Society of Scotland (RZS).

**b.** Approach to impact – The unit's impact agenda is based on a translational and, where appropriate, multi-disciplinary approach to research. At the core is a strategy of ensuring that end users are involved in **all** stages of the research process. Examples are outlined below where end users help identify research questions, design studies, organise data collection, and contribute to the dissemination and implementation of research findings into real world applications.

## End user focused research.

To ensure the unit's research activities best serve the needs of our non-academic partners, effort and resources have been invested in forming equal working relationships with industry, public bodies and the third sector. Staff are encouraged to engage with bodies that have a policy setting agenda in non-academic organisations. For example, Abertay psychologists hold or have held positions of responsibility and influence in bodies related to the unit's research strengths. In the review period such positions include: Director of Police and Community Relations Network, and Evidence and Investigation Network Committee Membership of the Scottish Institute of Policing Research (SIPR); the recruitment of a lecturer based at Abertay but funded by SIPR for the first 3 years (later promoted to the permanent position of Reader in Psychology); the Scottish Representative on the Executive of Society of Evidenced Based Policing (SEBP); and committee membership of the International Investigative Interviewers Research Group's (iIIRG) and founder of the iIIRG Research Bulletin.

The promotion of excellent working relationships with national and international industry partners has been prioritised. Researchers in the **Whitespace** group have longstanding working relationships with the finance industry through the multinational company NCR Financial Solutions; computer games companies and third sector organisations, notably charities related to visual impairments. A recent collaboration with the Petrochemical Industry (Petrofac) is focused on improving the design of industrial in-house training programmes that monitor stress levels and mitigate against the negative effect of stress during the training of critical incident management on oil rigs. This novel collaboration was initiated by a Team Leader in Petrofac who identified Abertay's Psychology Division as one with a reputation for studying 'real world' problems. The collaboration draws on the expertise of psychologists and physiologists and makes use of the



unique simulator facilities available in Petrofac's training suite in Montrose, Scotland.

The **Investigation, Security, Policing and Intelligence (I-SPI) Group's** aviation security industry focused research involves government agencies and -security firms in the development of a new research and evaluation tool for determining baseline individual aptitude and threat detection performance. The work, endorsed by the Home Office Centre for Applied Science and Technology (CAST), involves a number of airports including those in Dundee, Inverness, Benbecula, Stornoway, Wick and Islay (all run by HIAL: www.hial.co.uk) and Glasgow Prestwick airport (owned by Ryanair). The security managers in these airports were actively involved in determining the definitive characteristics of the tool under development.

End users as gatekeepers to participants and data collection.

The I-SPI group works closely with end users to gain access to data not normally available to academic researchers. The development of the Self-Administered Interview (see Impact Case Study 1: SAI) was only possible with the direct trialling of the tool by numerous police forces including Greater Manchester Police. In the airport security project, a list of certified aviation security providers and trainers in the UK was compiled by the Department for Transport and made available to the researcher. Security managers in all airports were responsible for organising access to data collection, providing access to expert participants and X-Ray machines not normally available to academic institutions. NCR Financial Solutions provide Abertay researchers access to industry standard touchscreens and automated tellers in order for data to be collected in the Whitespace self-service retail study. Petrofac's custom built simulators have been made available to Abertay researchers for the stress research project. The mental health charity Penumbra provided direct access to clients involved with their services and data as part of their licensing agreements with the University.

## Dissemination of research output to end users.

A translational approach to research requires a parallel approach to publication. In addition to targeting academic journals, staff are encouraged to publish their findings in end user focused periodicals and publications. During the REF period psychological research conducted by **I-SPI** and **Whitespace** researchers has been published in The Policing Journal, The Scots Law Times, and Policing: An International Journal of Police Strategies and Management. The **EBAB** group have published their practitioner oriented papers in The Psychologist, The Psychiatrist, and Mental Health Today. The more accessible research findings are, the more likely they are to be picked up and used by practitioners not involved in the original research. To this end, Abertay has also created a central fund to support the costs associated with open access publishing. Researchers without access to funds to cover publication costs can make an application to this fund. Excellent quality output with an applied focus is prioritised.

Research staff are supported to present findings at conferences and workshops arranged by public bodies and non-academic organisations. For example, throughout the review period psychology **I-SPI** researchers regularly presented their findings at Scottish Institute of Police Research (SIPR) conferences and workshops, Society of Evidenced Based Policing (SEBP) conferences, and The International Investigative Interviewer's Research Group (iIIRG) conferences (the 2011 conference was hosted at Abertay). Audiences at these conferences tend to be an even split of practitioner, policy makers, government representatives and academics, thereby ensuring dissemination beyond the academic community. Likewise, work from the **EBAB** group has been presented at the Refocus on Recovery Conference 2012, 2nd Scottish Mental Health Nursing Research Conference, 2013) and Internationally (e.g. 11<sup>th</sup> World Association for Psychosocial Rehabilitation Congress, Milan 2012, Mental Health Europe, Croatia 2012).

A successful dissemination of research output directly to end users has been provided by the portfolio of CPD courses and masterclasses on offer at Abertay. These courses, based on the research conducted by **I-SPI** researchers, are designed to initiate practitioner reflection and evaluation of current practice when interviewing vulnerable children. Over the review period over 80 senior investigating officers, specialist social workers, solicitors and other professionals working with vulnerable children have participated.

In order to extend the reach of the unit's research impact, staff are supported to attend and present their research findings directly to the end users even when based abroad. Recent examples include, **I-SPI** researchers presenting findings from child witness interviewing research to practitioners in collaboration with: the Forensic Psychiatry Unit for Children and Adolescents, Finland; FBI's National Academy of Associates, Switzerland; EU Criminal Justice Programme;

## Impact template (REF3a)



Public Health Foundation, Georgia; Modern Women's Foundation, Taiwan; Fundación Amparo y Justicia, Chile. Research based workshops in the treatment of sex offenders have also been offered in Australia, New Zealand, Korea and Canada.

Abertay operates a centralised communications function to manage and influence our reputation for excellence and ambition in applied research. This includes a programme of media releases designed to generate coverage in news media locally, nationally and internationally and in specialist media, supported by engagement with key audiences and stakeholders. Our commitment to this strategy is demonstrated by our publication of 9 press releases in A/Y 12/13 relating to research in this UoA, as opposed to 1 in the last year of the RAE 2008 period

#### c. Strategy and plans

Our aim is for Psychology at Abertay to be the leading department in Scotland for translational psychological research. Going forward our strategy to achieve this is for:

- all research groups to continue to have a translational approach to research activity;
- all research groups to encourage multi-disciplinary collaboration;
- researchers to have a parallel approach to dissemination of research findings (e.g. academic and end-user facing publications);
- the Division to value equally knowledge transfer activities and traditional research outputs
- the Unit to expand its research focused CPD opportunities to end users.

The University will continue to invest in individual researchers and groupings that have the potential to produce excellent research with real world impact. In particular, the Unit will build on successes and continue to attract researchers with an international reputation in researching policing and security issues. We will ensure that the productive relationship with the individual police forces in Scotland is, at least, as strong in the newly formed Police Scotland. In particular, the aim is to affect change in all UK Police Forces and agencies working with vulnerable children by ensuring that an evidenced-based approach to interviewing children is the norm. This will be realised by widespread adoption and implentation of extended forensic evaluations when interviewing children as outlined in the work of **I-SPI** researchers. To facilitate influence throughout the UK we will foster research links with the newly formed College of Policing. A further aim is to become the identified experts in Scotland for vision science, leading on industry-related projects in this sector.

## d. Relationship to case studies

Our strategy of engaging in translational research, working closely with end users, utilising multi-disciplinary teams, and having appropriate dissemination strategies has been central to the success of both submitted case studies.

The development of the Self-Administered Interview (SAI) was based upon the findings of excellent quality ESRC funded research in the field of applied human memory. Early discussions with investigating officers of how best to implement these findings into existing police procedures was soon followed by full field trials carried out by investigating officers in "live cases". The publication of the findings in traditional peer reviewed academic journals, was complemented with dissemination through Police Journals, SIPR and SEBP conferences, written reports and presentations directly to the Association of Chief Police Officers (ACPO). As a result, numerous police forces in the UK and beyond are now using the SAI interview tool to complement their existing interview techniques. At the time of writing over 2,500 officers have been trained in its use.

The development of the Questionnaire on Attitudes Consistent with Sex Offending (QACSO) was initiated primarily by the early development of an untested treatment programme devised by a forensic psychology practitioner working with sex offenders with a learning disability. A Chief Scientist Office (CSO) grant funded a collaboration with an experimental psychologist, allowing a validation study and an investigation into the psychometric properties of the tool to be conducted. To maximise the reach of the tool, the published QACSO was made freely available to suitably qualified individuals working in the forensic field. A follow up grant from the CSO facilitated the writing of a user manual which was again made freely available to practitioners. The principal investigators actively disseminated the findings of the research and travelled extensively to specialist forensic services throughout the world to train practitioners in its use. Today the QACSO is the most widely used tool for measuring cognitive distortions in sex offenders with an intellectual disability. Its use will likely further expand due to recent requests to translate it into Japanese and Korean. In line with Abertay's open access publication policy, these requests were granted.