

Bournemouth Psychology

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Welcome!

Welcome to the inaugural newsletter of the Department of Psychology in the Faculty of Science and Technology at Bournemouth University. In addition to welcoming back our returning students we are also very pleased to be able to welcome...

Our new undergraduate and postgraduate students

Our new PhD students James Day, Helen Thackray, Martin Vasilev, Catherine Johnson, Mary Duah-Owusu White

Our new colleagues Dr Tim Slattery, who has joined us from the University of Southern Alabama and Clare Bowie, who will be working with Dr Terri Cole



New Research Centres

In July 2015 the Department of Psychology launched two research centres, the Research Centre for Behaviour Change, led by Dr Katherine Appleton, and the Cognition and Cognitive Neuroscience Research Centre, led by Dr Jan Wiener.

The work of the Research Centre for Behaviour Change (RCBC) aims to develop knowledge of the psychological factors underlying health, health behaviours and wellbeing, and develop strategies and interventions for improvement. Research focuses on both clinical and general populations, covers a range of behaviours and psychological conditions, and uses a variety of methodologies. We currently have strengths particularly, in eating behaviours, eating disorders, physical activity, sleep, substance use, psycho-oncology, asthma and clinical psychology and psychotherapies. We have a leaning also towards interventions that are behavioural and/or involve emerging technologies, e.g. gaming technology, websites, mobile phone apps. This increasing use of emerging technologies has also resulted in increasing research with a focus on online behaviours, and aspects of online safety and wellbeing.

The overall aim of the Cognition and Cognitive Neuroscience Research Centre (CCNRC) is to develop knowledge of the cognitive and neural processes underlying typical and atypical behaviour. Research in the CCNRC focuses around three main areas: face processing, attention & memory, and visual cognition. Research is both basic and applied and utilizes a range of methodologies and techniques, including eye-tracking, functional brain imaging, brain stimulation, and behavioural experiments. The overall aim of the Cognition and Cognitive Neuroscience Research Centre (CCNRC) is to develop knowledge of the cognitive and neural processes underlying typical and atypical behaviour.



Recent Publications

Abutalebi, J., Guidi, L., Borsa, V., Canini, M., Della Rosa, P. A., Parris, B. A., & Weekes, B. S. (2015). Bilingualism provides a neural reserve for aging populations. *Neuropsychologia*, 69, 201-210. doi: 10.1016/j.neuropsychologia.2015.01.040

Bate, S., & Bennetts, R. (2015). The independence of expression and identity in face-processing: evidence from neuropsychological case studies. *Frontiers in Psychology*, 6, 770. doi: 10.3389/fpsyg.2015.00770

Bate, S., Bennetts, R., Mole, J. A., Ainge, J. A., Gregory, N. J., Bobak, A. K., & Bussunt, A. (2015). Rehabilitation of face-processing skills in an adolescent with prosopagnosia: Evaluation of an online perceptual training programme. *Neuropsychol Rehabil*, 25(5), 733-762. doi: 10.1080/09602011.2014.973886

Bate, S., Bennetts, R., Parris, B. A., Bindemann, M., Udale, R., & Bussunt, A. (2015). Oxytocin increases bias, but not accuracy, in face recognition line-ups. *Soc Cogn Affect Neurosci*, 10(7), 1010-1014. doi: 10.1093/scan/nsu150

Bennetts, R. J., Butcher, N., Lander, K., Udale, R., & Bate, S. (2015). Movement Cues Aid Face Recognition in Developmental Prosopagnosia. *Neuropsychology*. doi: 10.1037/neu0000187

Elisa, R. N., & Parris, B. A. (2015). The relationship between core symptoms of ADHD and the Cognitive Reflection Test in a non-clinical sample. *Cogn Neuropsychiatry*, 1-8. doi: 10.1080/13546805.2015.1068687

Gregory, N. J., López, B., Graham, G., Marshman, P., Bate, S., & Kargas, N. (2015). Reduced gaze following and attention to heads when viewing a 'Live' social scene. *PLoS One*, 10(4).

Hasshim, N., & Parris, B. A. (2015). Assessing stimulus-stimulus (semantic) conflict in the Stroop task using saccadic two-to-one color response mapping and preresponse pupillary measures. *Atten Percept Psychophys*. doi: 10.3758/s13414-015-0971-9

Hills, P. J., Eaton, E., & Pake, J. M. (2015). Correlations between psy-

chometric schizotypy, scan path length, fixations on the eyes and face recognition. *Q J Exp Psychol (Hove)*, 1-15. doi: 10.1080/17470218.2015.1034143

Liu, M., He, X., Rotsthein, P., & Sui, J. (2015). Dynamically orienting your own face facilitates the automatic attraction of attention. *Cognitive Neuroscience*, 1-8. doi: 10.1080/17588928.2015.1044428

Rudd, J., Butson, M. L., Barnett, L., Farrow, D., Berry, J., Borkoles, E., & Polman, R. (2015). A holistic measurement model of movement competency in children. *Journal of Sports Sciences*, 1-9. doi: 10.1080/02640414.2015.1061202

Sales, M. P., Polman, R., Hill, K. D., Karaharju-Huisman, T., & Levinger, P. (2015). A novel dynamic exercise initiative for older people to improve health and well-being: study protocol for a randomised controlled trial. *BMC Geriatr*, 15, 68. doi: 10.1186/s12877-015-0057-5-0057-5

Outreach and engagement

Human navigation

The Royal Institute of Navigation (RIN) in association with the Knowledge Transfer Network (KTN) invited Dr's Jan Wiener and Angela Gosling to present their current research on 'Human Navigation' at the annual RIN conference held at Trinity House, Tower Hill, London on Wednesday 10th June 2015. This conference provided a forum for researchers and associates from commercial, industry, admiralty, aviation, rail network and road transport sectors, bringing together those interested in various aspects of human navigation. Along with the presentation of navigation research being carried out at BU other speakers presented work on the increasing use of e-navigation tools and how these affect modern seafarers, the use of co-operative machine-human systems (GPS) and human factors in aspects of military aviation. The day was a success with

much interest expressed in the human navigation work being carried out at Bournemouth University.

Bournemouth Churches Housing Association

Psychology students from Bournemouth have been working with BCHA, which supports members of the community experiencing a range of issues including homelessness, employment training, family disputes, domestic violence and adult literacy. The students have been working to help implement PIE (Psychologically Informed Environments), which aims to empower people through creating an environment in which they are respected and encouraged. Dr Becky House has been working with BCHA to develop further voluntary and placement opportunities.

Conference Talks

Lesley Laver gave a talk entitled 'Barriers to Change in Resistant Offenders' at the British Psychological Society Division of Forensic Psychology annual conference in July, and is involved in ongoing research in UK prisons.

Several members of the department gave talks at the European Conference on Eye Movements in Vienna in August. Dr Ben Parris delivered a talk entitled 'To explore or exploit? Using pupillometry to track norepinephrine activity in adults with ADHD symptoms'. Rhiannon Barrington gave a talk on 'Dyslexic adult readers show transposed-letter effects in reading'. Dr Nicola Gregory presented 'Hypervigilance for faces but typical gaze following in social

anxiety'

Dr Gregory also presented 'Emotional dysregulation facilitates emotion recognition independent of dwell time to faces' at the Experimental Psychology Society Meeting in Lincoln in July.



Dr Jacqui Taylor and Dr John McAlaney each gave several talks at the Social Networks in Cyber-

space conference held at the University of Wolverhampton in September. Dr Taylor gave two talks entitled 'An exploration of factors affecting group cohesion and team play in Multiplayer Online Battle Arenas (MOBAs)' and 'Trial by Social Media: how do you find the jury, guilty or not guilty?'. Dr McAlaney gave two talks that arose from work with Dr Raian Ali and Dr Shamal Faily in the Department of Computing, which were entitled 'Participation in online adversarial actions: Group dynamics, biases and the perception of the correct course of action' and 'Mitigating circumstances in cybercrime'.

New MSc Forensic and Neuropsychological Perspectives in Face-Processing

The new MSc Forensic and Neuropsychological Perspectives in Face-Processing has been validated and is now open for applications. This is an exciting new course that capitalises on the department's expertise in face recognition, and presents a unique combination of forensic and neuropsychological perspectives to the discipline. This applied course trains students in the neuropsychological assessment and management of clinical disorders characterised by face-processing deficits, and considers limitations in face recognition performance in policing, passport control, and security settings. Students are also trained in using the latest forensic software in constructing composite images of suspects' faces. Exciting projects are offered in partnership with Dorset Police, and students also have access to our vast database of adults and children with prosopagnosia (face blindness). An expert team of internal and external international experts in the field support the teaching of this course.



Student achievements

Congratulations to Simon Ferneyhough, Andrew Moss, Rebecca Ellis and Natalia Adamczewska, all of whom have recently passed their transfer examinations.

Research capacity

The Faculty of Science and Technology has invested £100k into MRI access at Poole Hospital, which will further enhance the ability of Psychology to engage in neuropsychological research.

Dr Sarah Bate has been interviewed by the [Daily Express](#) as part of their article on living with face blindness.

Dr Jacqui Taylor was interviewed by [BBC Radio 1 Newsbeat](#) on the topic of cyberbullying, and

In The Media

how this may differ from other forms of bullying.

Dr Andy Mayers has been featured in the [Bournemouth Echo](#) for his work with Dorset Police on providing mental health training for police officers. This is part of the Mental Health Street Triage

Project, which aims to equip police officers with improved knowledge and skills to assess members of the public displaying signs of mental health distress, without enforcing powers under section 136 of the Mental Health Act and taking them into custody.

Research News and Funding Success

Forensic psychology and crime

Dr Terri Cole has been awarded Fusion funding to undertake focus group research with investigators and crime analysts from Dorset Police. Crime analysts support investigations by collating and studying information to help detect and reduce crime. They look for patterns in, and summarise data using charts, timelines and maps, to draw inferences and prioritize lines of enquiry. Key to successful utilisation is knowing what to ask analysts to do. Yet there could be improved cohesion between analysts and investigators. Investigators may be unsure of products provided, analytical reports may be lengthy, unsubstantiated, inconclusive, or unused and training received can be ad hoc. This project will explore these challenges. In related work Lesley Laver has been awarded £9,000 from the Fusion Fund to write comparative paper looking at Police juvenile interviewing processes internationally.

Continuing collaboration with Dorset Police Dr Sarah Bate has received funding for a new HEIF5+1 project investigating superior face recognition. The project runs for one year, and will employ a post-doctoral research fellow. It aims to create new diagnostic tests to identify superior face recognisers within the Police Force, and these individuals will be used for specific tasks, including victim identification and the spotting of suspects on CCTV footage and in crowds.

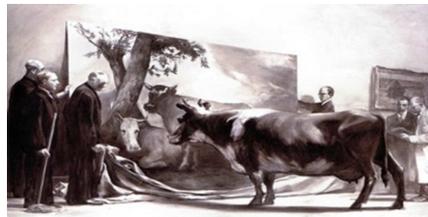
Dr Nicola Gregory has been awarded funding from the Experimental Psychology Society to look at the influence of the potential for two-way vs. one-way interactions with onscreen others on eye movements in a project called: *I can see you too! How does potential inter-*

action with onscreen others influence social gaze?

Beauty in the eye of the user?

If we are going around an art gallery we are often aware that we are evaluating the aesthetic appeal of the artworks. What we may be less aware of is that when we are interacting with computers, websites, and applications on our mobile phones the aesthetic appeal of the interfaces we are using matters too. Appeal can make interfaces easier to use and certainly makes our interactions more enjoyable.

Dr Angela Gosling and Professor Siné McDougall recently received Fusion funding to support a collaborative network with colleagues in



at Fribourg in Switzerland and Swansea University to find out more about the role of aesthetic evaluations in human-computer interaction. They examine how we make decisions about the appeal and usability of an interface. These 'decisions' start when we unconsciously respond to beauty and appeal within the first few milliseconds of encountering an interface and continue through to habitual everyday use. By investigating these processes we will develop a better understanding of how interface appeal influences user performance and lead to better interface optimisation.

Ameliorating the impact of errors and complications on surgeons

Surgical and clinical procedures carry with them the potential for adverse events, the complications and errors that may arise in the course of normal medical practice. When complications or errors arise, surgeons need to respond to the challenge of continuing to provide effective patient care and may also need to deal with the reactions of the patient's family, with the judgments of colleagues, and sometimes with disciplinary or legal proceedings. Medical training does little to help clinicians prepare for the stresses that may be engendered so it is not surprising that personal distress in surgeons can affect the quality of care they provide and can lead to depression and burnout. Doctors have even been called the 'second victims' of adverse healthcare events.

Professor Siné McDougall, Dr Kevin Thomas and Dr Helen Bolderston are working with Kevin Turner from Royal Bournemouth Hospital to conduct the first national survey of surgeons examining the nature and extent of the impact of adverse events on surgeons in the UK and to develop an online toolkit to provide tailored support for surgeons facing difficult situations. This work is supported by two BU matched funded studentships (one with Nuffield Health and the other with Royal Bournemouth & Christchurch Hospitals NHS Trust). One student - Catherine Johnson - will commence in September 2015 and the other - Stephen Richer - will start in April 2016.