I am very proud to introduce our second annual report for CeBSAP. It's been an exciting if challenging year, and one that has emphasised the importance of behavioural science and applied psychology.

Our year started in June 2019 with our very successful external launch, attended by a wide range of stakeholders including those from local government, public health, business and healthcare. We were very pleased to welcome Dr Tim Chadborn, Behavioural Insights and Evaluation lead for Public Health England as our keynote speaker. The afternoon saw our audience attending a range of workshops and poster sessions that gave a flavour of the work that we do and how this could be applied in a range of real-world settings.

We have hosted a number of events over the year, including an excellent dissemination event for the MRC-funded Cog-LAB project led by Associate Professor Lynne Barker. Our research seminar series has seen some outstanding talks. Highlights include Professor Matt Field speaking about the longer term impacts of temporary abstinence from alcohol e.g. Dry January, Dr Simon Goodman who spoke about the role of media representations of the refugee crisis and how these changed over time, and Dr Hannah Merdian talking about her work as a reflective scientist practitioner in the field of child sexual exploitation.

We have delivered training to local councils on the application of behavioural science, and the practicalities of behaviour change and championed behavioural
science through our connections with the Yorkshire and Humber Behavioural Science in Public Health Hub, and voluntary work with the Change Exchange to support efforts to promote antimicrobial resistance in Ghana.

Our research, on a broad range of topics, has continued to flourish with projects on Probiotics in people with Parkinson's, testing of an insomnia self-management app, engagement with a career development website for young people in Blackpool to name but a few.

On 11th March 2020 WHO declared the coronavirus a pandemic and on 23rd March a lockdown was declared in UK. The crisis has really brought to the fore the importance of behavioural science and psychology. It is central to understanding how people have reacted, recovery and mental health, and how we can support people to adhere to the complex and changing guidance that is so important to reduce infections. We have been leading the way nationally to respond to this challenge for example: Dr Rachael Thorneloe co-led a team to produce a scoping review of factors affecting uptake and engagement with digital contact tracing mobile apps, that was included in papers provided to SAGE to inform the government response; we have worked with local councils to advise on their communication plans around prevention; I sit on the British Psychological Societies COVID-19 Behavioural Science and Disease Prevention taskforce that provides guidance to policy makers. We expect that COVID-19 will continue to be a focus for work in 2020/21.

Here follows a summary of the activity of CeBSAP during 2019/20. We hope that you find it interesting and informative. Please contact us if you think we can help you or your organisation or business with their work. We also hope that you will join us for some of our future events.

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Keep up to date with our latest news: www.shu.ac.uk/cebsap

Contact us: cebsap@shu.ac.uk

Follow us: @CeBSAP
CeBSAP Mission & Aims

Our mission is to transform lives. We do this by creating knowledge and providing innovative, practical solutions to real challenges. CeBSAP applies contemporary psychological theory and behavioural science to issues of wellbeing, health, cognition, behaviour change and social inclusion. We provide access to leading academics and researchers and undertake research and consultancy work with a variety of funders and clients.

CeBSAP's areas of expertise are based around three themes:

- Developing interventions focussed on behaviour change and well-being based on psychological theory and behavioural science.
- Using advanced technology neuro-cognitive testing to explore normal and impaired cognitive function and behaviour.
- The application of psychological theories and research methods to provide evidence-based, rigorous solutions.

We have extensive experience conducting psychological research to provide tailored evidence-based solutions. We have worked with local governments, police forces, social services, schools, charities and commercial organisations.

We have expertise in a wide range of research methods:

- Quantitative methods including: randomised control trials, multi-level modelling, innovative computerised diagnostic tests, questionnaire and survey design, psychometric testing
- Qualitative and mixed-method approaches including: interviews and focus groups, IPA, narrative approaches, discourse analysis, thematic analysis, framework analysis
- Our laboratory facilities include: Eye tracking, EEG, visual psychophysics, retinal imaging, video-suite, and focus group and interview facilities.
Neuro-Cognitive Testing Lead: Associate Professor Lynne Barker

The neurocognitive testing theme combines highly skilled, innovative researchers working on diverse topics within our suite of well-equipped behavioural laboratories. We pride ourselves on our capacity to develop new technologies and assessment techniques for use with normal, elderly and neuropathological groups, to drive new approaches and theories to intractable problems, and to produce economically viable and effective solutions to research, clinical and practice-based questions. We can measure EEG, retinal parameters, track eye movements, measure visual functions, capture cognition (from low-level attention through to complex decision-making and language), assess biophysical responses and create bespoke in-house experimental and computer-based tests. Some current projects work with NHS Foundation Trusts, mental health, sleep and dementia charities and external agencies across diverse patient and normative groups.

For enquiries please contact: l.barker@shu.ac.uk

Psychological Theories & Methods Co-Lead: Associate Professor Laura Kilby

We are passionate about applying psychological theory and methods to explore and address real world challenges. Our research cuts across many professional fields in national and international settings. We have collaborated with police and prison services; worked in primary care, oncology, paediatrics, dental and pharmacology settings. We have worked with charities including Age UK and partners in the private sector including Lane 4 management consultancy. Our expertise spans a wide range of qualitative and quantitative methodologies and differing theoretical perspectives. We work with you to discuss options and identify the right approach for each project that we undertake. We are always happy to share general insights from our work with external organisations. Selected work is showcased in the ‘Spotlight’ section of this report.

For more information or informal discussion about how we might be able to collaborate with you please contact me here: l.kilby@shu.ac.uk
The Centre for Behavioural Science and Applied Psychology (CeBSAP) has been involved in a wide variety of events from conferences to seminars.

CeBSAP External Launch

We were delighted to welcome over 120 delegates from local government, public health, healthcare, education, policing, business, voluntary organisations and other higher education institutes to meet members of staff from CeBSAP and find out more about the centre and the range of research projects being carried out there.
There were a range of practical workshops and presentations based around the three CeBSAP themes: behavioural science, behaviour change and well-being; neurocognitive testing; and applied psychological theories and methods.

Work being undertaken at CeBSAP includes: working with Doncasten Council to understand and address physical inactivity in disadvantaged communities; NHS Foundation Trust projects, devising and testing interventions to address low levels of adherence to medication; developing computerised diagnostic tests for use with brain injury, stroke and dementia; and developing the resources to support prevention of doping use in fitness and sport.

CogLAB Dissemination Event

Dr Lynne Barker, Associate Professor in Cognitive Neuroscience, led an event showcasing the impact of CogLAB; an interactive computerised task used to assess cognitive ability of patients recovering from traumatic brain injury.

Over 30 academics and health professionals attended the event. Dr Nick Morton, Consultant Clinical Neuropsychologist (RDASH, NHS Foundation Trust) discussed the complications of neurological assessment and how the CogLAB project has led to progress in this area.

The team have now acquired additional Grow MedTech funding for the next stage, in which the CogLab tool will be further developed for eventual commercialisation.

The project was funded by the Medical Research Council (MRC) and carried out in collaboration with The University of Sheffield and clinicians from the Sheffield Teaching Hospitals and Rotherham, Doncaster & South Humber (RDASH) NHS Foundation Trusts and developed by Hive IT.
CeBSAP Behaviour Change Training

CeBSAP can deliver training in behavioural science and behaviour change through short courses and workshops. If you would like to discuss what we can offer to your organisation please email: cebsap@shu.ac.uk.

Approximately 80 Sheffield City Council employees, from several departments, attended two workshops delivered by Professor Maddy Arden & Dr Martin Lamb. Different teams from across the council had already started to come together to address behavioural challenges the council is facing around improving services for residents and improving systems within their workplaces. The workshops were designed to introduce behaviour change frameworks and tools that would support them in managing these challenges.

In the workshops, delegates were encouraged to work collaboratively to explore the behaviours involved in their team’s specific challenges. Teams were supported in defining the barriers and facilitators to changing those behaviours, and then finally in designing interventions to change the behaviour.

Sheffield Council delegates were provided with a toolkit for behaviour change and ongoing support specific to different areas of work.

The CeBSAP team have also worked with Doncaster Council public health team and community officers, to provide health behaviour change training to their employees working with Doncaster residents.

The training consisted of five, 1-day workshops delivered over six weeks to two different cohorts. The sessions covered the importance of promoting preventative health behaviours (e.g. quitting smoking, healthy diets), behaviour
change theory, and communication strategies to encourage helpful conversations.

The community and wellbeing officers were provided with the tools and techniques they needed to start conversations about health behaviours and to encourage behaviour change.

**BSPHN Learning Webinar**

On Monday the 15th June 2020, the learning webinar "Using Evidence Based Behavioural Science Approaches to Inform Coronavirus Support & Management" was hosted by the North West and Yorkshire and Humber Public Health Networks in collaboration with the Behavioural Science and Public Health Network (BSPHN) and Public Health England (PHE).

Over 150 people from health and social care professions and organisations attended the webinar to learn more about how behavioural science can be used in their work.

Professor Maddy Arden (CeBSAP) gave a presentation which discussed how to take an evidence-based approach for COVID-19 preventative behaviours when there is a lack of evidence. The talk considered interventions that work to help different people adhere to key behaviours and how these interventions could be delivered in the context of COVID-19. Dr Rachael Thorneloe (CeBSAP) and Dr Tracy Epton (University of Manchester) gave a presentation about test and trace apps for COVID-19. The presentation considered the four interrelated key behaviours that are required to optimise the effectiveness of T&T apps, and examined the evidence around performing these behaviours.

Professor Arden’s presentation can be viewed [here](#) and Dr Thorneloe’s presentation can be viewed [here](#).
CeBSAP Seminar Series

CeBSAP hosts a range of talks on behavioural science and applied psychology from experts from across the U.K. For further information about our seminar series and to sign up to our mailing list, please email: cebsap@shu.ac.uk

Seminar topics in 2019-2020 included:

Dry January: Are there any long-term benefits of temporary alcohol abstinence?
Professor Matt Field, Department of Psychology, University of Sheffield

This seminar discussed evidence from observational studies that suggests temporary abstinence from alcohol helps people to reduce their drinking in the longer-term, and explained why these findings are difficult to interpret. It considered the psychological mechanisms of action that might underlie enduring behaviour change after temporary alcohol abstinence. Preliminary work that aims to definitively answer this question by conducting a randomised controlled trial was also presented.

Understanding Anti-Refugee Arguments in the “Refugee Crisis”
Dr Simon Goodman, De Montfort University

This seminar drew upon discursive analyses conducted throughout the ‘crisis’, which have shown that: (1) the “crisis” itself has been portrayed in differing ways with differing implications; (2) the impact of the photographs of a drowned child refugee; (3) How the crisis featured in the Brexit debate; and (4) How Brexit featured in the ‘crisis’ debate about child refugees. Findings demonstrate the important role of media representations of the refugee crisis, but also offer some possibilities regarding how these can be challenged so as to bring about a more inclusive approach to refugees.

Working as a reflective scientist-practitioner: Assessing Individuals who have engaged in Child Sexual Exploitation Material Offending
Dr Hannah Merdian, University of Lincoln

This seminar outlined work leading to the development of an aetiological model of Child Sexual Exploitation Material offending. Research with practitioners and CSEM offenders led to the development of practical tools with the aim of providing systematic guidance for assessment and treatment providers. This work further highlighted the need to apply the principles of a reflective scientist-practitioner when working in a developing research area.
The Centre for Behavioural Science and applied Psychology (CeBSAP) undertakes research and consultancy work with a wide variety of funders and clients.

**Behavioural Science and COVID-19**

Researchers at CeBSAP are contributing to global research efforts promoting preventative behaviours to reduce the risk of COVID-19 transmission. CeBSAP can be contacted to discuss any needs you may have around applying behavioural science to your research, professional practice or business.

Selected work related to COVID-19 is summarised at the start of this section.

To find out more, email us at: [cebsap@shu.ac.uk](mailto:cebsap@shu.ac.uk)
Dr Rachael Thornloe (CeBSAP, Sheffield Hallam University) and Dr Tracy Epton (University of Manchester) co-led a rapid scoping review to examine uptake and engagement with digital contact tracing mobile apps to control the spread of CoVID-19.

The effectiveness of contact tracing apps depends on adequate levels of uptake (e.g. user downloads and registers on the application) and engagement (e.g. the extent of app usage over time). It has been estimated that approximately 60% of the population need to use the application for it to be effective.

The report reviewed existing literature to summarise current knowledge about contact tracing apps but found that there is no evidence on the level of uptake and engagement with COVID-19 digital contact tracing applications and a dearth of evidence regarding the barriers and facilitators to uptake and engagement. It was concluded that uptake and engagement, and also the factors that influence this, must be well understood so that appropriate measures can be put in place to optimise uptake and engagement. The authors propose that behavioural science needs to be fully incorporated into the design and functionality of the app, as well as communications to make the tool a success.
BPS COVID-19 Behavioural Science Disease Prevention Taskforce

Professor Maddy Arden is a member of the British Psychological Society's Behavioural Science Taskforce

This group of leading behavioural scientists from across the UK have been working to produce guidance and policy briefings to inform the UK response to COVID-19.

Maddy was co-author of Psychological guidance for behavioural science and disease prevention to optimise policy and communication, available here which has had significant impact, being accessed on the BPS website over 5000 times since it was published in June 2020, being used by public health teams across the country, and being translated into Japanese.

Maddy was lead author of a BPS policy briefing about the proposed track and trace app available here which highlighted 4 key behaviours required for the success of the UK's track and trace app and the factors likely to influence these. She also wrote a sister article for The Conversation which suggested ways that behavioural science can be applied to help people overcome potential barriers, The full article can be read here.

Maddy co-authored of a BPS blog post highlighting the difficulties of persuading people to self-isolate to prevent the spread of COVID-19 which can be read here.

Members of the taskforce are currently writing behavioural science informed briefings for policy makers and the public on a range of behaviours including hand-washing, self-isolation, the wearing of face coverings, and health behaviours impacted by COVID-19 (diet, physical activity, alcohol use).

Further information about the taskforce and its work can be read here
Facecoverings

Wearing face masks will be mandatory in UK shops and supermarkets from July 24.

The Behavioural Science Consortium team has published advice and a poster to help people use masks as safely as possible.

Drawing upon behavioural science theory and techniques that have been effective in promoting other health behaviours, the advice considers barriers and facilitators to the effective use of face coverings in a way that is accessible to the general public.

The BSC advice can be read [here](#) and the poster downloaded [here](#).

COVID-19 Vaccination Uptake

Our work with Public Health Wales is examining barriers and facilitators to the uptake of vaccinations in NHS employees in Wales.

The CeBSAP research team are also working with NHS staff to co-design interventions to increase future seasonal influenza and COVID-19 vaccination uptake.

Recruitment is starting late summer. Results will follow soon!
A randomised double-blind placebo-controlled pilot study of probiotic use in Parkinson’s Disease

Associate Professor Lynne Barker, Dr Caroline Jordan and Dr Holly Wilcockson have recently completed data collection for a pilot study examining the feasibility of conducting a clinical trial of probiotic use in Parkinson’s disease patients.

A complex bidirectional interaction between the gastrointestinal tract and the central nervous system (the Gut-Brain axis), is adversely affected by Parkinson's disease. Recently, probiotics have been proposed as a potential intervention for systemic and neurological conditions through improvements to microbiome composition.

The primary aim of the study was to test whether the processes needed for a full scale clinical study: recruitment, randomisation, probiotic use, stool sample collection and DNA extraction/sequencing and behavioural/cognitive measures, work together and run smoothly. The secondary aim was to collect pilot data to determine the sample size needed for a full-scale study.

CeBSAP are the first research centre to conduct research of this kind and have worked in collaboration with Dr Caroline Dalton (Biomedical Research Centre, SHU); Professor David Sanders (Consultant Gastroenterologist) and Mr Richard Grünewald (Consultant Neurologist) from Sheffield Teaching Hospitals NHS Trust and Dr Bernard Corfe (The University of Sheffield, Medical School). The research team have recently formed the first microbiome network in the region, in collaboration with SITraN (University of Sheffield). For more information email: microbiomics@sheffield.ac.uk

Preliminary findings on the feasibility of conducting the research were recently presented at a GUTS and Microbiome Research Cluster E-workshop.

CAN A 12-WEEK PROBIOTIC INTERVENTION IMPROVE WELLBEING IN PARKINSON’S DISEASE? A RANDOMISED DOUBLE-BLIND PLACEBO-CONTROLLED PILOT STUDY?

Or the Feasibility of a feasibility study?

CFHealthHub: Evaluation and translation of a behaviour change intervention to promote adherence to medication in Cystic Fibrosis

Professor Maddy Arden has been leading the behaviour change intervention development for an NIHR-funded programme to develop and test a complex intervention to promote adherence to medication in people with Cystic Fibrosis.

The CFHealthHub intervention comprises a digital platform and app that feedback adherence data to patients and clinicians. Patients are supported via contact with a trained interventionist to build motivation, overcome barriers, and to make specific plans for treatment-taking that, over time, will become habits.

A large randomised controlled trial was conducted over 19 UK sites with 608 patients, over a 24 month period. This was completed in mid-2019 and papers are due to be published soon.

The programme was led by Dr Martin Wildman (Sheffield Teaching Hospitals), in collaboration with academics from a number of UK Universities including: Alicia O’Cathain, Daniel Hind, Sarah Drabble (University of Sheffield), Pauline Whelan (University of Manchester) and Judy Bradley (Queens University Belfast).

Following the trial, the sites continued to use the CFHealthHub platform and Maddy Arden is working with teams to support training, to help them embed the use of the intervention into clinical practice, and to continue to learn how best to do this through the CF Digital Self-care Behavioural Science Collaborative (see www.cfhealthhub.com).
SleepCogni

Associate Professor Lambros Lazuras and Dr Antonia Ypsilanti from the Department of Psychology, Sociology and Politics at SHU secured £234,340 to collaborate with industrial partners SleepCogni.

SleepCogni is a Sheffield based award-winning British medical device company at the forefront of personalised health technology for Insomnias. In July 2019, SleepCogni were awarded a six-figure Innovate UK grant, allowing them to further develop their patented technology which helps self-manage insomnia.

We are delighted to announce that Dr Lazuras and Dr Ypsilanti are leading the research to optimise SleepCogni’s capability for treating insomnia using a patented active biofeedback hand-held device, personalised by applying state-of-the-art artificial intelligence.

The focus of the project is to optimise SleepCogni's personalised active-biofeedback algorithms and AI software with data collected from eighty insomnia sufferers. This will provide the first extensive user experience of their wearable device. Finally, the project will support the first steps towards obtaining the relevant regulatory requirements for a medical device.

An article from TheBusinessDesk about the collaboration can be read [here](#).
The Forensic psychology team have secured £124,563 in funding this year to conduct research into reducing violent crime and child protection issues.

Dr Charlotte Coleman and Dr Kate Whitfield were successful in a bid for Home Office funding to carry out a process and impact evaluation for the South Yorkshire Violence Reduction Unit and HMI Probation funding to evaluate Youth Offending Teams. This vital work will enable these organisations to understand their impact and provide new knowledge to inform policy and practice. Dr Coleman and Dr Whitfield also secured N8 Policing Research Partnership funding to conduct research with young people exploring the effects of knife crime imagery on perceptions and attitudes towards knife crime. This research has national and international importance; informing the design of knife crime intervention projects and media coverage of knife crime related information. NSPCC funding was awarded to Dr Whitfield and Dr Oliver Merry to conduct research relating to the risk of sexual harm to young people engaged in competitive online gaming and eSports. Findings will contribute to the development of policy and safeguarding guidance in industry.

The Forensic and Investigative Research Group (FaIR) conducts research, consultation and evaluation in a number of areas including:

- Eye-witness testimony
- Interviewing children
- Self-harm and suicide
- Forensic mental health
- Risk assessment
- Service evaluation
- Child protection
- Domestic abuse and coercive control
- Cybercrime
- Knife crime
- Terrorism

The group draws upon specialist knowledge from its members:

Dr Jane Adlard, Dr Umair Akram, Dr Stefanie Ashton Wigman, Dr Charlotte Coleman, Dr Jennie Drabble, Dr Marilena Kryiakidou, Dr Megan Kenny, Dr Nicola Lonsdale, Dr Oliver Merry, Lisa Staniforth, Dr Kate Whitfield.
Sheffield City Council Secondment

Dr Holly Wilcockson was seconded to the Public Health Department at Sheffield City Council to assist with the development of a toolkit and guide for employees developing projects that would benefit from a behavioural science approach.

The Toolkit is designed to guide employees through the process of incorporating simple behavioural science into their work, from framing a problem, to using COM-B analysis to understand what interventions and solutions could be most effective at bringing about the desired behaviour change. Sheffield City Council has recently formed the 'Behavioural Approaches Steering Committee' to further embed behavioural science in to the ongoing work of the Council.

HIV Project Funding Update

Researchers at CeBSAP have been providing behavioural science expertise to a project exploring how people live with HIV. The project is being conducted in collaboration with colleagues from the College of Health, Well-being, and Life Sciences.

In July 2019, Dr Martin Lamb was successful in securing funding from the British HIV Association to conduct research into how HIV specialists can promote an active lifestyle for people living with HIV. Dr Lamb attended the BHIVA conference in September 2019 to accept the award.
CeBSAP researchers have been working with Public Health England to support healthcare professionals deliver brief physical activity advice in primary care, as part of the Moving Healthcare Professionals Programme.

The project examines whether existing tools and solutions available to help support the delivery of advice, such as communication skills training and tools to assess level of physical activity, address healthcare professionals reported barriers and facilitators for delivering advice to patients.

The Change Exchange: Antimicrobial Resistance

The Change Exchange (led by the University of Manchester) works with healthcare partners in the UK and low-middle income countries to form partnerships to improve healthcare provisions in LMICs.

PhD student Rebecca Turner and Dr Martin Lamb (CeBSAP) volunteered through The Change Exchange to work with a partnership based at a hospital in Saboba, Northern Ghana, specifically focusing upon the challenges of antimicrobial resistance.

They visited Saboba in November 2019, as part of a multidisciplinary team from the UK to provide behavioural science support to help understand the behaviours associated with antimicrobial resistance in Ghana.
Student Mental Health

Dr Umair Akram, Dr Jennie Drabble and colleagues have been conducting important research into student mental health. In a recent study, they found a relatively high prevalence rate (37.3%) of suicidality risk, with 42.2% of students in the sample contemplating suicide at least once within the past twelve months. A video abstract of this research can be viewed [here](#).

Further research suggests that internet depression memes may be a coping strategy. Dr Akram said “Depressive memes visualise the experience, which for many may be difficult to put into words. This can often lead to depressed people becoming isolated. By sharing and observing depressive memes, depressed people can form socially supportive and emotional bonds with others. Ultimately, this might help depressed individuals to feel that they are not alone in the experience of their symptoms”. Dr Akram and Dr Drabble aim to conduct more research, in the hope that it may provide a new way to tackle depressive symptoms. An article in The Conversation about this research can be read [here](#) and a video abstract can be viewed [here](#).

Biosimilar Medication for Psoriasis

Dr Rachael Thorneloe is leading novel research into the use of biosimilar medications for psoriasis.

'Biosimilars' are approved generic versions of biologic medications that can be manufactured when the original product's patent expires. The patent was removed from Adalimumab (Humira), the most commonly prescribed biologic for psoriasis, in 2018. This has resulted in a number of biosimilar medications being made available in the NHS.

Dr Caroline Jordan and Dr Holly Wilcockson are conducting interviews to better understand patient experiences of being offered an Adalimumab biosimilar.
Dr Chris Brown is a social psychologist researching how people manage and make sense of change and the psychological, social, and cultural factors that influence adjustment to life transitions. He uses qualitative methods to explore how people understand their experiences.

Dr Brown has a passion for applied research that makes a difference to people’s lives. His research includes work with former Olympians to improve their experience of retirement in collaboration with management consultancy firm Lane4. Dr Brown tells us “Working with Rick Cotgreave at Lane4 to design and deliver a programme to help athletes to navigate such a challenging experience in their life was immensely rewarding. On a professional level, developing an effective intervention using principles from psychology was intellectually satisfying. But more important, on a human level, it was extremely gratifying to have made a difference to the people that took part in our programme and have a meaningful impact on their lives.”

Associate Professor Ale Soranzo is co-lead for CeBSAP’s Psychological Theories & Methodology theme. Dr Soranzo is an experimental psychologist, researching visual cognition, including visual attention, memory, and perception. This includes exciting exploration into some of the world’s most famous artworks, including Leonardo Da Vinci’s ‘La Bella Principessa’.

Dr Soranzo has enjoyed interdisciplinary collaborations with experts in the field of Art & Design. He has worked with designers to help them evaluate people’s preference for certain aesthetic qualities (e.g. preferred texture, shape and size) which, in turn, enabled designers to develop products with maximum appeal to the end-user. As Dr Soranzo tells us “The collaboration between psychology and design has been very fruitful. Design experts had knowledge about innovative objects and were able to build them. As a psychologist, I had the methodological expertise to help them find out about people’s aesthetic preferences. Our collaboration led to knowledge that will support designers in the future development of interactive objects.”

Find out more about Dr Brown’s work with Lane 4 [here](#) and find out more about Associate Professor Soranzo’s work with designers [here](#).
The Behavioural Science Consortium brings together academics from Sheffield Hallam University and The University of Manchester to provide behavioural science expertise and evaluation.

We draw upon expertise from across a number of research centres in SHU: CRESR, CDARE and AWRC and across a range of academic disciplines including: behavioural scientists, social scientists, social and public policy experts, psychologists, educationalists, sports scientists and statisticians; and a wide range of research methods expertise including trials, experiments, survey design, evaluation and qualitative research.

**Start**

Researchers at CeBSAP have been using behavioural science to maximise Blackpool school pupil's engagement with Start; an online careers platform for 11 to 18 year olds.

An understanding of the barriers to engagement informed a 'See' 'Think' and 'Do' intervention. Pupils will be provided with resources such as a personalised booklet describing Start and offering tips on how to use the website and a keyring with a QR code, linking them directly to the platform. Pupils will also take part in classroom based activities to promote positive beliefs about career opportunities.
Doncaster Behavioural Training: Phase 3

Doncaster is one of 12 areas in England selected by Sport England to be a local development pilot area for testing projects aimed at reducing physical inactivity. The Behavioural Science Consortium has been working with Doncaster Council to explore opportunities for physical activity and design interventions to increase physical activity within communities.

The project was delivered in three phases: In Phase 1 a survey was conducted to assess levels of activity; in Phase 2, community members conducted interviews within their communities to understand barriers and facilitators to activity. Phase 3 of the project has now been completed which involved conducting co-design workshops within different Doncaster communities.

Workshops were attended by local community members, council members, local community officers, and leisure providers. The co-design workshops (in collaboration with TK2A) aimed to address barriers to being active by encouraging community members to design physical activity interventions that would be appropriate for their communities. Different tasks were used in the workshops to encourage participants to think about how interventions might be effective for themselves and other community members. Examples of the tasks included were; mapping exercises, personas, and creating story boards.

One of the tasks in the workshops was to map activities: Community members considered the physical assets available and discussed ideas to incorporate physical activity and moving more into daily routines.

The full report for this project can be found online [here](#) along with further information about the rest of the work we conducted with Doncaster.
Doctoral students are conducting diverse research within CeBSAP, using a broad range of methodologies.

Research Topics include:

- **Applied Social Psychology**
  - Transition to Fatherhood (Suzy Hodgson)
  - Community building through engagement with memorials (John Land)

- **Discursive Psychology**
  - LGBTQ+ popular protests and social movements (Adam Bates)

- **Education**
  - Bilingual Lexicon (Nikki Dean Marshall)

- **Forensic Psychology**
  - Transnational child sex offending (Sarah Wefers)
  - Self-harm triggers and functions (Alexandra Rabjohns)
  - Knife crime (Bethany Allen)
  - Child criminal exploitation (Jordan Crawford)
  - Targeting anti-social behaviour in children (Emma Thacker)

- **Health Psychology**
  - Adherence to Treatment in Cystic Fibrosis (Rosie Martin)
  - Exercise Support in Advanced Prostate Cancer (Rebecca Turner)
  - Physical activity in women from disadvantaged communities (Maddy Leather)
  - Misuse of painkillers (Petra Examilioti)

- **Mental Health**
  - Perfectionism and Mental Health in Student Populations (Lucy Cooper, Cameron Pattinson)
  - Autism (Helen Basu Chaudhuri, Amanda Wilcox)
  - Death and Bereavement (Simon Ashe, Ben Partridge)
  - Self-Disgust (Anna Robson)

- **Neuro-Cognition**
  - Nutrition and traumatic brain injury (Rebecca Denniss)
  - Perception and visual attention (Gabriele Pesimena)
  - Eye tracking and social cognition after brain injury (Leanne Greene)
PsyPAG Annual Conference

From the 23rd-26th July, Sheffield Hallam University held the PsyPAG conference at Collegiate Campus. A team of Psychology PhD students and ECR’s successfully bid to hold the conference, which welcomed postgraduate Psychology students and trainees Psychologists from across the UK. Overall approximately 130 delegates attended the conference and 100 attended the conference dinner at City Hall.

The conference focused on the importance of personal health and well-being particularly whilst undertaking postgraduate studies, and took the opportunity to celebrate achievements whilst conducting postgraduate studies.

The Psychologist magazine has written a piece about the conference which can be found here.
Research Dissemination

In May 2020, Rebecca Denniss gave an interview for an article in Todays Dietician about the role of micronutrients and nutrition in TBI recovery; offering this advice: "People, after TBI, need to avoid inflammatory foods like highly processed/refined foods, red meat, alcohol, and eat more unprocessed foods. Green leafy vegetables are good because they have lots of the vitamins and minerals that may be important to head recovery". The full article can be read here.

Rebecca also presented a poster: 'Eat the Rainbow: Micronutrients and Cognitive Change in the General Population' at the North American Brain Injury Society Best Practices in Brain Injury Medicine and Neurorehabilitation Conference, New Orleans, Louisiana in February 2020. Speaking about the conference, Rebecca said: "This was the best conference I have ever been to (and not just because it was in New Orleans at Mardi Gras). The speakers included people whose work I have been reading throughout my PhD and there was so much to learn and get excited about ". The poster abstract can be read here (page 8).

Rebecca Denniss' PhD examines nutrition and traumatic brain injury. She is supervised by Associate Professor Lynne Barker, Dr Catherine Day and Dr Paul Richardson.

PhD Success

Congratulations to CeBSAP students who have completed PhD's this year:

Dr Stephanie Acaster "Behavioural and electrophysiological correlates of lightness contrast and assimilation"

Dr Megan Bean "Best possible future self-writing: effects on well-being, self-regulation, and related processes"

Dr Nicola Dimelow "Emotion recognition ability in older adults"

Dr Oliver Merry "Child grooming: predicting level of risk to prioritise offenders"

To find out more about PhD research at CeBSAP, contact the co-chairs of the PhD group for Psychology: Alexandra Rabjohns ar5305@exchange.shu.ac.uk and Gabrielle Pesimena gp9191@exchange.shu.ac.uk
Professor Maddy Arden appeared on BBC Newsnight on 23rd June 2020 to talk about the easing of COVID-19 lockdown. Professor Arden was also interviewed by BBC Radio 4 PM about social norms, binary messages and how the public is responding to the Government's new lockdown rules. She has also featured on BBC Radio 2, BBC Radio 5 Live, BBC Radio Sheffield, BBC Essex, and BBC Radio York, as well as the news bulletins on 35 regional BBC radio stations across the country.

Dr Charlotte Coleman, spoke to BBC Radio Sheffield following the news that the Home Office is going to start using takeaway boxes to share anti-knife crime messages. Dr Coleman also took part in a BBC Radio Sheffield panel discussion on Gul Nawaz’s Eastern Air show on Sunday 10th March and was interviewed about knife crime intervention research at SHU on BBC Radio Sheffield.

Associate Professor Lambros Lazuras was featured in a video clip on the BBC website on Monday 22 July in an article about the Australian swimmer Mack Horton refusing to share the podium with Chinese athlete Sun Yang at the World Aquatics Championships in South Korea. Sun was banned in 2014 for use of the prohibited stimulant trimetazidine. You can read the full article and watch the clip here.

Dr Martin Thirkettle published an article in the Conversation which discussed research investigating how small variations in the background colour of photo line-ups can increase errors in eye witness identification of innocent suspects. The article can be read here.

Associate Professor Alessandro Soranzo published an article in the Conversation about the ways in which Leonardo Da Vinci was ahead of his time. Dr Soranzo discussed the visual illusions that were used by Leonardo, centuries before scientists understood the mechanisms behind them. The full article can be read here.

* Associate Professor title effective from 1st September 2020
Key Journal Articles 2019-2020


Gheorghes, T. N., Richardson, P., & Reidy, J. (2020). Local biases drive, but do not determine, the perception of illusory trajectories. Scientific Reports, 10(1), 1-12.


Soranzo A & Aquili L (2019). Fear expression is suppressed by tyrosine administration. Scientific Reports, 9(1) 16073.


