

Institution: University of Wolverhampton

Unit of Assessment: 4 Psychology, Psychiatry and Neuroscience

1. Unit context and structure, research and impact strategy

1.1 Unit Research Structure

The Unit is comprised of the Centre for Psychological Research (CPR) in the Faculty of Health, Education and Wellbeing. The Centre focuses on conducting rigorous, original research that has a significant influence on advancing psychological theory, research and practice in ways that benefit individuals and communities. We have also advanced the discipline in novel ways that reflect changes in society. For example, in light of the increased use in digital technologies, we have been instrumental in the development of the new field of cyberpsychology.

The Department of Psychology has 32 (30.7 FTE) academic staff in total. Of these, 21 (20.5 FTE) have significant responsibility for research including 1 female professor, 1 female reader and 3 male readers. Two of these staff are submitted under UoA3 and UoA23 as their research aligns with Allied Health and pedagogic research respectively. CPR incorporates and manages the research within psychology (aligned to UoA4) and is headed by Uther, who also works closely with the 2 Heads of Department (HoDs) in psychology. The HoDs in turn line manage the broader team of academics, including those on Teaching & Scholarship role profiles. Although CPR focuses on supporting staff with significant responsibility for research, we also welcome the participation of staff on teaching and scholarship profiles, with the view that we support any staff member that wishes to steer their career towards a more significant research focus if they are not currently on that trajectory. CPR was also strengthened by the appointment of Elaine Kasket as an honorary professor of cyberpsychology in 2020, whose expertise lies in surveillance, privacy and digital afterlives. Throughout the REF period, we have published 207 peer-reviewed journal articles, 20 conference papers, 38 book chapters and 9 books. Research within the CPR encompasses a breadth of topics in psychology within four research clusters, alongside four cross-disciplinary Special Interest Research Groups (SIRGs) as shown in Figure 1.

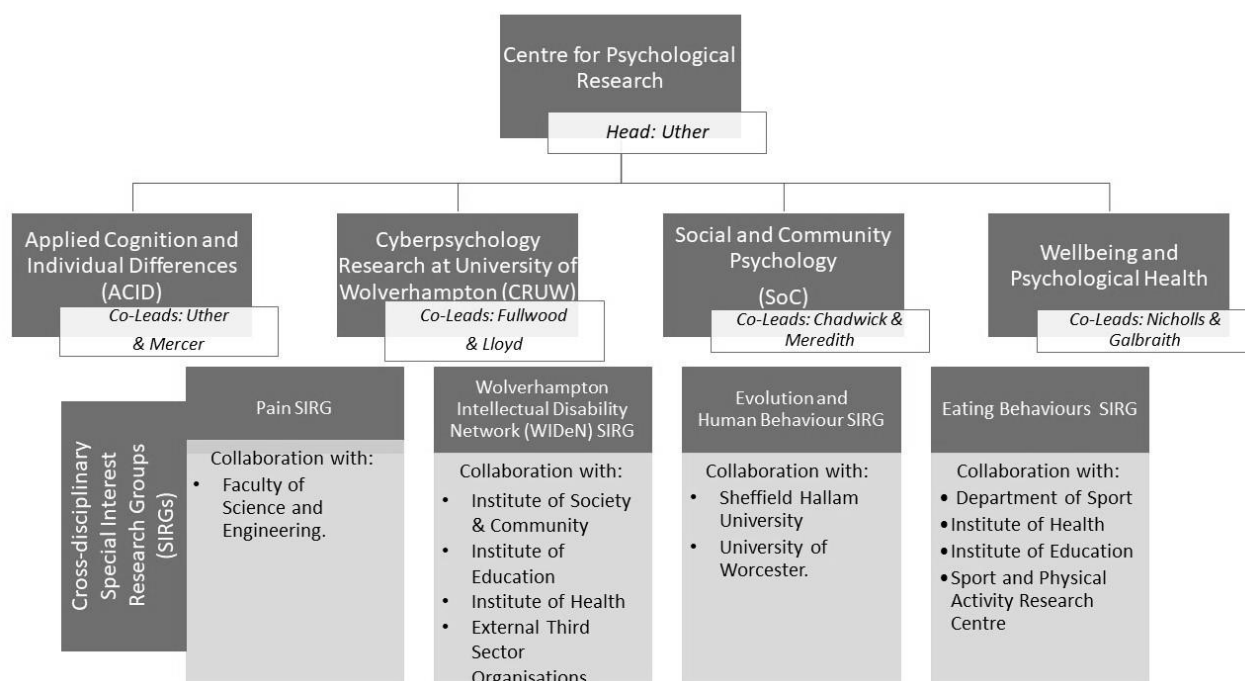


Figure 1. Overall structure of the Unit

Clusters are aligned to research strengths within the CPR and have interdisciplinary membership across the University with local, national and international external collaborators. The focus of each research cluster is detailed below.

1.1.1 Applied Cognition and Individual Differences (ACID)

The Applied Cognition and Individual Differences (ACID) group conducts research in cognitive psychology and individual differences that seeks to inform policy making, education, and to address societal challenges such as educational outcomes and work performance. ACID is a vibrant group of 6 academic staff members, an emeritus professor (Manktelow) and 5 PhD students. Its members continue to build a track record of publishing in high quality, peer-reviewed journal articles in prestigious outlets that span the sub-discipline such as *Memory & Cognition*, *Journal of Experimental Psychology: Human Perception & Performance*, and *Personality and Individual Differences*. Our cross-disciplinary approach (with colleagues in computer science, mathematics, criminology and education) is a strength. Our research spans a broad range of interests including learning, memory, language, interpersonal relationships and cognitive biases.

1.1.2 Cyberpsychology Research at University of Wolverhampton (CRUW)

CRUW drives forward the academic and applied socio-psychological study of the impact of the Internet and emerging technologies (e.g. social media, smartphones, virtual reality, video gaming) on our everyday lives. CRUW includes 9 academic staff members with significant responsibility for research from the Department of Psychology, 7 external associate members and 5 PhD students, who collaborate widely both within academia and beyond (e.g. Gamble Aware, Virtual Reality Experiences London, Defence Science Technology Laboratory, West Midlands Police Force, International Association of Cyberpsychology, Training and Rehabilitation). CRUW holds monthly cluster meetings where they support one another in research-related activities including strategic planning of research priorities and funding bid development. The research portfolio of CRUW members is diverse, however, key themes include online self-presentation, cybercrime and deviance, online gambling, addictive behaviours, educational and health applications of technology.

1.1.3 Social and Community Psychology (SoC)

The Social and Community Psychology research cluster contains 6 staff members with significant responsibility for research, 3 PhD students and 1 external associate (Platt, University of Sunderland). The group conducts research that is socially relevant and can be used to improve people's lives and enhance societal wellbeing. To this end, research work often takes an interdisciplinary approach to tackling current community and societal challenges and inequalities. The cluster's research explores applied areas of social and community psychology, including education and pedagogy, criminal behaviour and the law, intellectual and developmental disabilities, social interaction, and aspects of organisations. A particular research strength is in the field of politics and social justice, with 4 cluster members involved in research in this area.

1.1.4 Wellbeing and Psychological Health

The wellbeing and psychological health cluster conducts research that builds impact through regional, national and international partnerships, improving lives of individuals, families and communities. As the cluster is situated within a large Faculty of Education, Health and Wellbeing, it benefits from a rich academic mix including collaborators from allied health professions, public health, medicine, and sport science. The cluster includes 8 academics with significant responsibility for research and 4 postgraduate research students with diverse interests and expertise. There is a holistic view to the cluster's research culture whereby its research informs its teaching (e.g. on undergraduate health psychology, clinical psychology and on the Counselling Psychology Professional Doctorate). and where students are encouraged to participate in research projects, a strategy which has produced 9 publications from UG and PG student projects.

1.2 Research Achievements

The CPR has achieved a developmental milestone in its mission toward greater research impact by virtue of submitting to REF2021 as a discrete Unit for the first time. Our key objectives centred on activities that helped to establish ourselves as a formal research centre, resulting in greater public recognition of the high-quality applied research of our team. Our objectives were focussed on enhancing vitality and sustainability of our research, namely:

1.2.1 Encourage external and cross-disciplinary collaboration in our research

Our first strategic aim was to build on external and cross-disciplinary collaborations from a growing portfolio of consultancy and partnerships with community organisations, local government bodies and industry. Our view was that this would enable us to grow third stream income and impact that would strengthen our research profile. The department has collaborated with colleagues internally and externally with other disciplines (Sports, Health, Education, Social Care, Physics, Computer Science and Linguistics). As a result of these collaborations, we have successfully secured consultancy and knowledge transfer contracts with industry (Fullwood, Uther, Galbraith) and government/community sectors (Chadwick, Galbraith, Meredith) as well as producing outputs that would not have been possible without the input of expertise from colleagues in other disciplines (e.g. Forsythe, Nicholls & Uther). During the REF period, the department appointed a partnerships lead (Forsythe) and through this initiative, the department has now developed over 150 partnership arrangements. Examples of partnerships include participation in Academic Health Science Networks; the West Midlands Combined Authority Health and Workforce Development Working groups; local LEP's; the West Midland Innovative Health Working Group; The Black Country Consortium as well as research collaborations with Birmingham, Royal Wolverhampton and Sunderland NHS Trusts. We have also developed our own Psychology Community Research Clinic (PCRC), which is now in its third year. The clinic is a mental health and resilience-building initiative led by Kennedy, of the counselling psychology team. The clinic is an outward facing venture that caters to student and local community needs, as well as creating clinical placement and research project opportunities for our student trainees.

1.2.2 To encourage doctoral research by developing a pipeline from PGT programmes

As we have historically recruited about 70% of our PGRs from our existing taught courses, we have planned to further develop our portfolio of PGT programmes. For instance, building on our strengths in cyberpsychology, we launched the MSc Cyberpsychology during the 2017-2018 academic year. We also are currently validating an MSc in Counselling Psychology and are also launching online programmes through the Higher Education Partnership during 2021, namely: MSc Psychology, MSc Psychology of Mental Health and Wellbeing, MSc Organisational and Business Psychology, and MBA Psychology. These developments will expand our reach of student research projects in our research clusters and encourage the direct route from UG to Master's to doctoral level study for all of our areas of research strength, fostering the talent of young, up-and-coming researchers, so that we inject further vitality in our pool of early career researchers.

1.2.3 To prioritise research excellence and impact

A foundational aspect of our strategy is to encourage research endeavours that produce high quality outputs, supported by external funding. In addition to solid growth in external income, we also are supported by University QR funding. CPR has strategically invested into research assistance and continuous professional development, prioritising projects that enhance output quality and impact. During the period 2018-2020, we funded a part-time departmental research assistant, (Wilsdon; MSc Cyberpsychology graduate), who supported staff in accelerating the submission of publications by assisting in data collection and analysis. This not only improved our publication record, but also supported the professional development of one of our ECRs. Moreover, we have recruited external consultants to deliver training in disseminating our work and in measuring and describing its impact, beyond academia: (1) through REF impact workshops, and (2) through bespoke media training (Screenhouse Productions – training provider to the Royal Society).

1.3 Future strategic objectives for research and impact

Our strategy is determined by annual review from the CPR leadership team (readers and professor) which plans our research strategy and objectives and in turn is reviewed at Faculty and University Research Committees on an annual basis. In terms of our objectives for development of CPR in the post REF 2021 period, we are driven by our ambition to contribute to the wider body of knowledge within psychology and strengthen our reputation and links within the West Midlands, UK and other countries such as USA, Canada, Australia, France, Finland, Japan and Africa, where we already have links. We will prioritise societal and wider impact in communities and practice,

with emphasis on our strengths in applied cognition, community psychology, wellbeing and cyberpsychology. Within this REF cycle, we have successfully produced two impact case studies which leverage our strengths within cyberpsychology and wellbeing, and contributed to the 'Digestive Health' impact case study submitted to UoA3. We are also planning for future impact cases in psychology (e.g. impact of digital working and digital overload; healthy eating behaviours, and online gaming and gambling). In line with sector developments (e.g. open access, importance of equality, diversion and inclusion initiatives such as Athena Swan) and university strategy (e.g. emphasis on local partnerships, research communities and inter-disciplinarity), our strategy for our next phase of growth focuses on the following areas:

a) Promoting PGR recruitment and developing ECRs

We recognise that fostering and nurturing early career researchers is critical to a sustained research trajectory. With this in mind, we promote PGR enrolment by providing further support for PhD recruitment (see Section 2 for detail). We recognise that post-doctoral ECRs are important to our success, and thus nurture our ECRs by promoting engagement in internal schemes (e.g., Early Researcher's Award Scheme or ERAS) and external opportunities (e.g. Future Digi-leaders programme).

b) Promote Open Science and research integrity

CPR will engage more pro-actively with the culture of open science and research integrity. To this end, we wish to more actively engage with UK Reproducibility Network (UKRN) and charters promoting research cultures that are inclusive and open, such as Declaration On Research Assessment (DORA).

c) Growing partnerships within the West Midlands and throughout England

We wish to further our existing work beyond this REF cycle to establish University of Wolverhampton's reputation in applied research that benefits voluntary organisations and businesses within the West Midlands and beyond.

d) Grow cross-disciplinary links

A key area of strength is cyberpsychology. To this end, growing the collaborations – particularly within computing science and engineering – would be of mutual benefit to partnering departments.

e) Increasing awareness surrounding Equality, Diversity and Inclusion (EDI)

We plan to apply for a departmental Athena Swan award, for which we have formed a self-assessment team that has been at work since 2020 gathering data and planning actions. We also aim to examine the gap in ethnic minority attainment and encourage BAME researchers, particularly those aspiring toward senior roles.

1.4 Research integrity and ethics

CPR has embraced the recent and rapid paradigm shift in research culture that has emphasised transparent and reproducible research practices. Staff are becoming actively engaged in open science practices, with CPR members such as Bhogal (e.g. Bhogal & Bartlett, 2020; Margana et al, 2019; Bhogal et al., 2019) using pre-registered hypotheses and making data and materials openly available on the Open Science Framework (OSF). Others have followed suit and have publications in the pipeline with pre-registered hypotheses. Overall, during the period, we have 58 journal publications in our Unit with gold access routes, alongside 3 conference papers, 1 commentary, 2 book chapters and 1 book published as open access. Uther has taken on the role of institutional lead for UKRN, a peer-led consortium seeking to promote high quality and rigorous research. This development has been inspired from discussions with Lahart (Department of Sports Science, who has previously started a local network with UKRN) and Westwood, who joined CPR in August 2020 and runs an open science seminar through Kings College London. More generally, all psychology staff receive in-house support with the ORCID system (all have an ORCID profile) and have received training in using the research information system (Elements) and our repository

for outputs (WIRE). Compliance with Open Access (OA) is regularly checked within CPR and forms a key aspect of the appraisal system for research active staff.

We have also improved our ethics processes by devolving to departmental level. Previously, ethics applications from psychology were assessed at faculty level but we formed our own committee in 2019. This allowed for more thorough subject-specific scrutiny and input into the ethics process, ensuring compliance with British Psychological Society (BPS) guidelines. Our ethics committee comprises 9 members (6 academic staff, 2 professional staff and 1 external lay member). The committee has developed psychology-specific guidance, which supplements university-level guidance and includes specific detail for conducting internet-mediated research (increasingly important since the COVID-19 pandemic). Staff have mandatory training in GDPR compliance every 2 years.

2. People

2.1 Staff Recruitment and Development Strategy

With each new academic appointment, we consider the fit with our research groupings and subject coverage. A cornerstone of our recruitment and staff development strategy encourages internal development of academic staff to develop expertise and grow into senior leadership roles. Although one professor was recruited externally (Uther), she was a replacement following the departure of Prof Dando, who achieved internal promotion to professor via our staff development scheme. Four staff (Fullwood, Galbraith, Nicholls and Platt) have achieved promotion to reader. Staff development is central to our research strategy, with Continuous Professional Development (CPD) activities planned during annual appraisal. CPD sessions encompass a broad range of topics, from 'using Bayesian statistics' to 'improving publication record' and 'media skills'. CPR also assigns a senior research mentor (reader or professor) to each member of research staff, who collaboratively set research targets that cover grant income, outputs, impact and broader scholarly activity. We also participate in the Faculty mini-sabbatical scheme, whereby staff may be released from teaching and administrative duties for 4-6 weeks to concentrate on a research project of benefit to their career and the unit's profile. Through this scheme, Nicholls took time in 2014 to write outputs, resulting in successful promotion to reader. We are committed to career progression, supporting staff toward applications for promotion, and ensuring sustained growth in the senior leadership team over time.

2.1.1 Developing ECRs

A key part of our strategy is to support ECRs. We have delivered several CPD sessions (in addition to ERAS and Doctoral College offerings) for early career researchers in our unit. We also support ECRs via a research mentor scheme. This entails individual target setting (in terms of output and grant submissions) and from this, each research mentor shares relevant funding opportunities, reads draft grant applications and journal article submissions to help staff achieve their research targets. Clusters also run their own events which benefit ECRs to upskill within their own sub-discipline. To this end, we have seen ECRs' successes in bids for grant funding through small grant successes funded by Experimental Psychology Society, the BPS and AHRC. We have also successfully obtained funding for ECRs, including securing funding for a PhD studentship (for Homer) from Tillots Pharma. We secured a research fellowship funded by GambleAware, and applied for subsequent follow-on funding for that fellow (Nicklin) from Facebook Research. Nicklin has also been put forward as a candidate for Future Digileaders programme run by KTH Royal Institute of Technology in Sweden.

6 members of psychology staff have been awarded Early Research Award Scheme (ERAS) funding in the period, which is one of the most successful application rates from a single department in the University. The ERAS scheme provides individuals with a budget of GBP5,000 to produce publications, further research and/or development of funding applications, alongside a tailored researcher development programme. This scheme has allowed all the individuals to produce outputs that have scored high 2*-3* ratings at mock assessments. This has also led to individuals producing impact as a result of their research (e.g. work of Boyda in suicide prevention and Orchard in the field of breastfeeding).

2.1.2 Equality and Diversity

CPR is committed to supporting and promoting equality and diversity, – e.g. through balanced gender representation in recruitment panels, compulsory unconscious bias training, and adjustments to take into account individual circumstances. As a result we have a diverse and inclusive staff composition: 11% of staff have a reported disability (above the sector average of 4% according to HESA data), 62% of staff are female (above the sector average of 46% in the period 2014-2019), and our female, ethnic minority professor (recruited to lead the CPR in 2018) is an excellent boost to female and BAME representation in leadership (in the UK, only 19.8% of the professoriate are female and 7.3% are from BAME backgrounds. During the REF period, 5 of the 6 new lecturers recruited, and 2 of the 5 staff promoted to reader, were female.

CPR also engages in EDI-focused research and external engagement activities, including:

- i. A project funded by Wolverhampton Learning & Teaching Commissioned Awards 2018/19 (Lloyd, Chadwick and Ormerod) to investigate the use and utility of video-recorded lectures for students with additional support needs (e.g. mental health issues, LDD/IDD, autism, dyslexia).
- ii. We host an annual “Girls 4 Science” schools outreach event to promote female involvement in science (paused in 2020 due to COVID-19), which involves 10 local primary schools, supported by Sport and Science colleagues as well as several members of the department (Uther, Nicholls, Orchard, Lloyd, Wesson, Derrer-Rendall, Petters, Adams-Quackenbush, Kidson & Warwicker). Attendees’ feedback evidenced that the event encouraged pupils to challenge their perceptions of gender stereotypes in science.
- iii. Our departmental Athena SWAN working group is actively working towards a Bronze Department Award. We are already implementing initiatives that will feature in our submission (scheduled for academic year 2021-22). These include supporting the promotion of women to senior levels, enhancing support for research for those with childcare responsibilities, and scheduling meetings between 10am-3pm. Our self-assessment team is co-chaired by 1 BAME female professor (Uther) and 1 female ECR (Nicklin). In total we have 12 male, 8 female members from both academic and administrative roles.

2.1.3 Professional Development

We aim to tackle the under-representation of women and BAME staff in research, especially senior positions, and sponsored 2 female staff to attend the Leadership Foundation’s Aurora programme, within the assessment period. We are also supporting 3 female members of staff in completing doctoral research, which will also grow the number of potential supervisors in the department. Opportunities for conference attendance are offered equally to all staff, and those with caring responsibilities are encouraged to include relevant childcare costs within funding bids. For example, Uther successfully obtained childcare costs to support her overseas visit to the University of Helsinki during this REF period.

2.1.4 Supporting staff with career breaks and interruptions

Staff returning from career breaks (e.g. parental or long-term medical leave) are supported in several ways. They can take paid keeping-in-touch (KIT) days, to undertake activities that facilitate a smooth reintegration into the workplace. For example, during the submission period, Nicholls used KIT days during 2 periods of maternity leave to complete 3 publications, a book chapter, PGR supervision, mentoring of an ERAS scholar, and work on a project commissioned by Health Education England. In between her career breaks, Nicholls successfully applied for promotion to readership. Finally, during the COVID-19 pandemic, we have been extremely flexible to adapt working to suit those with childcare responsibilities (e.g. paid or unpaid time off, flexible working hours and flexible meeting attendance for those running parallel home schooling provision).

2.2 Postgraduate Researchers (PGRs)2.2.1 Recruitment

The PGR student community is key to our thriving research culture. We identify and nurture growing talent from our undergraduate and MSc courses, which is a crucial pool given that 14 out of the 19 PGRs have studied with us before. Of the 11 PGR completions in the period, 3 have gone on to work in our department as teachers and/or researchers. This is testament to our commitment to providing an excellent and vibrant research community, where they are well supported, and well prepared to enter academia through our structured development programme and mentoring in supervision.

19 PhD students (13 full time, 6 part time) commenced within this REF period, a growth of 35% from the last period, where we had 13 (9 full time and 4 part time). We grew our postgraduate research student numbers through securing self-funded PhD students by partnering with other institutes (e.g. IADT in Ireland for their graduates in MSc Cyberpsychology), securing funds from the University's Research Investment Fund (RIF) to support PhD bursaries, and achieving funding from charitable and industrial partnerships (e.g. GBP90,000 from DSTL for to support Tranter's research on intelligence gathering and persuasion across cognitive, cultural and gender divides).

We plan to grow our PGR number to 75 (30 PhD and 45 Professional Doctorate) within the next REF period. Our focus, as a newly developed research centre, is on building our research community for long term growth and sustainability. The following strategies are being used to maintain and build doctoral student numbers:

a) Growing supervisory capacity through training and mentoring new supervisors.

We have implemented compulsory training for new PhD supervisors, alongside mentoring with an experienced supervisor with a track record of PhD completions. This ensures that we will have enough capacity to supervise more PhD students and cover a range of subject matter expertise.

b) Developing partnerships with charitable organisations and industry.

We devoted efforts to securing studentship funding from non-research council sources and had two successful awards. One award came from Defence Science and Technology Laboratory (DSTL) and another was awarded through Tillotts Pharmaceutical company (match-funded by the Rotha Abraham Bequest Trust and the Royal Wolverhampton NHS Trust). We will take a proactive approach to developing PhD proposals within our clusters, in order to match research interests with appropriate funding calls. Individuals with prior successes act as critical readers to mentor and support new funding applications.

c) Develop our Professional Doctorate in Counselling Psychology programme.

Approved by the Health & Care Professions Council (HCPC) and accredited by the British Psychological Society, graduates are eligible to apply for HCPC registration as Counselling Psychologists and register for Chartered status with the BPS. To further contribute to our research strategy, the programme has been redeveloped with a long-term research-oriented focus, contributing to the number and quality of outputs. From September 2021 this programme will be registered as a research-degree, thereby increasing PGR student registrations by 15 per year, and will form a substantial element of our activity portfolio. This initiative will lead to improved research-informed clinical practice and will create pathways to clinically-oriented research outputs.

d) Involve our Undergraduate students in our research activities.

This is an important part of establishing a robust and vibrant research culture in CPR, and a successful strategy to grow PGR numbers. Of our currently registered PhD students, 5 have previously been research assistants as an undergraduate on either (i) the Research Opportunity Network (RON; coordinated by McFeeters) which advertises opportunities for undergraduates on staff research projects or (ii) the BPS Undergraduate Research

assistantship scheme (four awards within the period; Chadwick, Chen-Wilson, Fullwood and Taiwo). These activities have led to 14 outputs in the period.

2.2.2 Monitoring and Support

Overall PGR satisfaction was rated high (79% rated positively) in the 2019 Postgraduate Research Experience Survey (PRES2019), in line with sector benchmarks, and also showed an improvement since 2015 (70%). Within the REF period, we have had 11 successful, on time completions. Student progress is monitored through a faculty-wide Annual Progress Review (APR), whereby students are assessed by staff external to their supervisory team, against benchmarks commensurate with their stage in their research degree. Part of this process involves review of a bespoke skills analysis (using the Researcher Development Framework) to support timely completion and employability, and to identify appropriate training sessions from the university-wide research training programme offered by the Doctoral College.

An indication of the quality of supervision is given in PRES 2019, where the CPR was highly rated (86% positive), a result which demonstrates a trajectory of improvement from 2015 where we scored 75% positive. We attribute this improvement to the within-department mentoring in supervisory skills for early career researchers. We also rated above sector average in 2019 for research culture. The following comment from 1 of our PGR students illustrates the ethos we are trying to achieve:

“My supervisors are fantastic; they ensure that I am on the right track whilst also allowing me to work independently. They fully support me in all aspects of my PhD journey” (PRES, 2017).

In addition to the support from their supervisors, all PGRs have the opportunity during the APR to discuss any concerns with an independent assessor. To be a research supervisor, mandatory training and regular CPD with the Doctoral College is required. To augment this training, new supervisors are paired with experienced ones in order to develop and hone their supervisory skills. We have a broad range of skills and subject specialisms within our pool of supervisors, and this has grown substantially, with 14 new supervisors being trained in the assessment period.

The CPR has a dedicated Postgraduate Research Tutor (Nicholls), who provides a point of contact for PGR students to support them in both pastoral and research skills development from pre-application through to completion. PGRs have a shared office space dedicated for PGRs only, access to networked computers, printing facilities, a well-stocked library and online journal catalogue. The learning centre is open 24/7 (hours were shorter during the ‘lockdowns’), and we have a subject specialist librarian.

2.2.3 Career Development

There is a strong and well-integrated PGR culture which provides an environment for PGRs to experience academia, and so enhance their professional development. In PRES 2019, our Unit scored highly (89% rated their experience positively) for research skills, which is above sector average and again evidences an improvement since PRES 2015 (71.9% rated positively). This improvement may be attributable to the formation of the CPR, and the opportunities this has provided through involvement in the research clusters and a clear and promoted programme of relevant CPD sessions and opportunities to present their research. All research students are invited to monthly CPD sessions and are active members of research clusters. PGRs present at cluster meetings, and at centre events, such as the yearly CRUW cyberpsychology conference (11 PGRs have presented, and 18 attended during the period), and internal events, such as the launch of the Centre for Psychological Research in 2018, where 3 PGRs delivered talks and 3 presented posters.

PGRs are encouraged to present their work in departmental seminars, to help them prepare for conferences, and develop the skill of presenting their research, which will equip them to handle their viva or external presentations. In the REF period, 17 PGRs have been supported to present their work externally, totalling 30 conference papers, of which one student was successful in securing competitive internal funding to attend. Combined with this, the department has invested

GBP15,000 per annum in paid teaching opportunities for postgraduates, for example, undergraduate cyberpsychology lectures (Fox-Hamilton, Hulme, and Summerfield), health (Warwick) and Political (Manktelow) psychology lectures, and undergraduate dissertation supervision (Fernandes-Aguilera and Rhoden). In 2019, the department introduced the equivalent of 1 year fixed-term 0.5 FTE paid demonstrator posts for PGRs. These opportunities for career development are reflected in the high rating (77 % positive) for professional development achieved in PRES 2019. We also recognise that it is important to offer PGR-only events to help PGRs develop a sense of cohort and student community. A number of social events are held each year to encourage PGR from different disciplines to meet and get to know each other, e.g. the Doctoral Society events at the Student Union).

3. Income, infrastructure and facilities

3.1 Research Funding and Strategies for Generating Research Income

The CPR secures substantial research grants that enhance research in the clusters and contribute to high-impact publications. We sought to strategically apply for small grants, and built on those successes towards larger grants, which has been a fruitful strategy. Our figures show that in the early stages of the REF period (2013-14 and 2014-15), we started with a modest annual research income of just GBP31,514. However, from 2015-16, this has increased considerably to GBP167,553 in the year 2019/20. In total, our research income during this REF period now stands at GBP670,967, which is a commendable achievement for a Unit not previously entered into REF. We attribute this growth to strategic investment in both new research-active staff (see 2.1) as well as CPD activities, coaching and mentoring to support bid writing.

The income has primarily come from charities, central government sources (both UK and EU) as well as non-EU sources rather than traditional research council sources, reflecting the applied nature of our research. These awards have been won from competitive commercial tenders and in open competition from a broad range of funding bodies including, for example EU Horizon 2020; The National Institute of Health Research; Health Education England; The Ministry of Defence; The British Psychological Society; Sport England (with Herefordshire Council); The British Academy; GambleAware; Crohn's & Colitis UK.

3.2 Organisational Infrastructure Supporting Research and Impact

Research income support is provided at University, Faculty and departmental levels. We are supported by the University's Project Support Office (PSO), which provides pre- and post-award support. The PSO has runs a 'Grants Academy' programme, in which staff receive training in research project development and management. One of our staff (Galbraith) has participated in this programme, which has undoubtedly played a part in his grant successes. We are also supported by a Faculty Enterprise Team which provides horizon scanning of funding opportunities and matches bid opportunities to subject matter experts. The Enterprise Team also provide practical support for costings and administrative aspects of grant bid development and follow-on support from successful awards. Within the department, CPR's senior staff (reader and professor level) are paired with staff on teaching and research role profiles to help draft bids, promote impact and read drafts to improve quality of research outputs. The CPR is also internally supported by university-appointed impact officers who can help build and promote impact in our research. The fruit of these efforts is that psychology research has encouraged engagement with a broader range of pathways to impact in a wide variety of sectors, including outreach and work with marginalised populations (e.g. work with charities such as Buses4homeless).

3.3 Facilities

CPR has at its disposal exclusive, dedicated laboratory space: eight small and four medium-sized general labs, a health psychology lab with electrocardiogram, plus 5 therapeutic training labs containing audio/visual recording equipment. All labs are equipped with state-of-the-art technology and software including e-prime, Gorilla, NVIVO, SPSS, Qualtrics and Biopac resources. In addition, we possess a library of 358 psychometric tests. We have a cyberpsychology laboratory with Virtual Reality equipment, gaming computers and consoles, and a host of other contemporary technologies. We also have our own observational laboratory suite (activity room, observation

room and control room) equipped with a one-way mirror and audio/visual recording facilities. The CPR also hosts a 64-capacity, flexible-use computer suite. All labs, equipment and software are available for psychology staff, postgraduates and undergraduates to book via our psychology technicians for research and teaching projects. Looking to the near future, in 2020 we were invited by the University to outline a plan for significant investment (in the region of GBP400,000 over 3 years) to expand existing lab equipment and invest in our future growth (outcome will be known in May 2021).

4. Collaboration and contribution to the research base, economy and society

We are committed to societal benefit, public engagement and advancement of the discipline evident in the following key areas:

4.1 Research collaborations, networks and partnerships

CPR has developed a vibrant network of research partnerships, across local, national and international networks. Local partners include: SPARC sports research centre; Wolverhampton Cyber Research Institute (WCRI); West Midlands Police; Royal Wolverhampton NHS Trust; Worcestershire Acute Hospitals NHS Trust; Birmingham Community Healthcare Trust; Birmingham Children's Hospital; Black Country Partnership NHS Foundation Trust. National partners include: University of Winchester; University of Plymouth; Manchester Metropolitan University; Applied Health Research Group at Aston University; University of Ulster; Dr Apter, (educational psychologist and previous Chair of the BPS Division of Educational and Child Psychology); Dr Ketkar of the Royal Orthopaedic Hospital NHS Foundation Trust; Dr Nosa Manchester University NHS Foundation Trust; South Tyneside and Sunderland NHS Foundation Trust, Buses 4 Homeless charity, Samaritans charity, and the national Breastfeeding Network. International collaborators include CICERO institute, University of Helsinki; University of Sydney, Australia; University of Jyväskylä, Finland; Penn State University, USA; Institute of Art, Design and Technology, Dun Laoghaire, Ireland; Queens University in Ontario, Canada; Trinity College Dublin, Ireland; Linköping University Sweden; Karolinska Institutet, Solna, Stockholm, Sweden. These research collaborations have assisted us in developing impact (e.g. work with Buses 4 Homeless, West Midlands Police, Breastfeeding Network), procure funding (e.g. Nicholls secured a seedcorn NIHR grant to work on emotional eating with the Department of Sport colleague Devonport; Uther's was part of a funded project with Wolverhampton Cyber Research Institute's Cybermind project and the 'Say it again Kid' project with colleagues in Helsinki, Finland), and have also provided critical subject matter expertise from outside our discipline that have resulted in research outputs (e.g. Forsythe's work with colleagues with colleagues from computer science in Maynooth University and Boyda & McFeeter's collaborations with various NHS trust to produce clinically relevant research in the field of suicide prevention).

4.2 Relationships with key research users, beneficiaries or audiences

Over the past 7 years we have made a conscious effort to conduct research within psychology that strongly aligns with the improvement of wellbeing, in accordance with the University's ambition to transform lives through research. Within this REF cycle, we have successfully produced 2 impact case studies, spanning cyberpsychology and mental health sub-disciplines. The first (Cyberpsychology) relates to the use of digital technologies (especially social media) and sense of 'online self', which has had wide ranging impact from policy making within NATO, to voluntary sector engagement with people with intellectual and developmental disabilities and contemporary discourse around 'online identity'. Our second case study (Mental Health), from the Wellbeing and Psychological Health cluster and the Mental Health, Suicide Research and Prevention Group, speaks to the development of best practice and training in suicide prevention particularly within emergency service and health professionals, and has informed policy and training within the West Midlands and throughout England. Research with West Midlands Police, West Mercia Police and North Wales Police has led to bespoke training and best practice recommendations to equip officers and staff with improved suicide prevention skills and better stress awareness. Work on health professionals' mental health help-seeking has informed policy in the UK Government and bodies such as the American Psychiatric Association. This work has also been used as evidence to support the need for mental health services for clinicians. The Eating Behaviours SIRG has

produced a patient information booklet on binge eating in conjunction with a multidisciplinary NHS team, leading to clinicians adopting new psychological interventions benefitting people who are overweight or obese. The Pain SIRC and Eating Behaviours SIRC are both linked to NHS and community services.

4.3 Engaging with diverse communities and publics

Our researchers collaborate with other community groups and agencies. Orchard has presented CPD sessions for the Breastfeeding Network which was informed by the research funded from an Early Career grant (mentored by Nicholls). Purewal has led a collaborative project with Wolverhampton Art Gallery, the Royal Wolverhampton Trust and the University of Wolverhampton's Art School to de-stigmatise chronic IBD in the South Asian female population.

In addition, our various interdisciplinary SIRGs have sound connections with service users and/or community networks. These connections facilitate awareness of current priorities and enable the CPR to make meaningful societal contributions. WIDeN has hosted conferences, networking and seminar events (i.e. thrice yearly seminar and networking events inviting local service providers, people with intellectual disabilities and researchers), as well as collaborative research projects (e.g. 'An online life like any other' engaged the activity of over 800 self-advocates with intellectual disabilities and autism). WIDeN has links with West Midlands and the Black Country Advocacy, Social and Training Groups of people with intellectual developmental disabilities (i.e. Dudley Voices 4 Choice, Building Bridges Training and Friend2Friend Lichfield). The Mental Health and Suicide Prevention group has also worked with Highways England and the Samaritans informing decision-making about memorials and publicity of suicide hotspots. They have also guided the charity 'Buses 4 Homeless' in developing their mental health risk assessment policy as they support men transitioning out of homelessness.

4.4 Contribution to the sustainability of the discipline

1 of the co-leaders of CRUW (Fullwood) was instrumental in the development of the new BPS Cyberpsychology section. Fullwood was co-editor and another 5 staff (Attrill-Smith, Chadwick, Fullwood, Lloyd and Orchard) were authors of chapters in arguably the most comprehensive collection of cyberpsychology topics in a textbook to date, the Oxford Handbook of Cyberpsychology (2019). This is the core text for our MSc Cyberpsychology programme, which is currently 1 of only 2 taught programmes in cyberpsychology in the UK and 1 of 4 worldwide. Chadwick, Fullwood and Orchard sit on the BPS Cyberpsychology committee and Fullwood is the section's liaison to the BPS Research Board. Fullwood was scientific chair for the section's inaugural conference. Additionally, Fullwood works with a special interest group within the new BPS section whose focus is on employability and career pathways. Through these continued activities, members of CPR have increased the employment options of our cyberpsychology graduates and positioned cyberpsychology as a new, applied discipline that equips graduates with transferable skills that are useful for future careers.

The online political discourse network, funded by the BPS Social Psychology Section, was founded by cluster member Meredith in collaboration with colleagues at Loughborough University, and comprises international membership (UK, Belgium, USA, Netherlands, Sweden and Nigeria). Since its inception in early 2020, 3 events have been held to share research and build a collaborative research agenda for the network.

1 of ACID's members (Bhagal) founded the interdisciplinary Evolution and Human Behaviour SIRC, which uses an evolutionary perspective to understanding human behaviours such as interpersonal relationships and online behaviour. The group was established in March 2019 and has 3 graduate members, 4 academic members from psychology as well as external and honorary members: Dr Hughes (Sheffield Hallam), Dr Farrelly (Worcester), and Prof Manktelow (Emeritus Professor at Wolverhampton). 2 papers have been published with student members and 4 papers have been published with internal and external members of the group.

The CPR has also leveraged the development of interdisciplinary links from our research strengths to develop our research and impact further. Examples inside and outside the university include:

- i. Nicholls is a member of the Faculty of Clinical Health Psychology Obesity BPS special interest group, which links research with practitioners in weight management across the country. She has authored a report and provided a training session for this group on the selection of outcome measures for use in clinical practice.
- ii. Chadwick has links with a national group of health and social care practitioners working in the field of dysphagia management for people with intellectual disabilities and has consulted and collaborated on the development of national safety guidelines, a risk assessment guide and research projects.
- iii. Boyda and McFeeters have relationships with the West Midlands Police and West Midlands Fire Service as part of ongoing research aimed at exploring attitudes to suicide among first responders. In addition, following their collaboration with Public Health England (PHE) and the West Midlands Suicide Prevention Initiative, PHE approached our researchers to tender for a new bid to examine the mental health and well-being of "Unaccompanied Asylum-seeking children (UASC) in Wolverhampton".
- iv. Galbraith and colleagues from the independent research company Tiller Research were awarded 2 grants to evaluate interventions to improve physical and social activity. The 'Active HERE' and 'Our Community Can' projects were aimed at adults from Herefordshire and Worcestershire who are physically inactive. In addition, Galbraith evaluated an education intervention for school pupils, funded by ASDAN and the Progression Trust. Galbraith has also investigated barriers to psychological help-seeking with the West Midlands Police and the Nursing and Midwifery Council.
- v. Fullwood was invited to consult with NATO's innovation hub around his work on online self-presentation and identity. Fullwood's expertise has contributed to a study report which will be leveraged for the development of strategies, policies, and capabilities aimed at improving NATO's ability to operate in cyberspace.
- vi. Uther is an academic working on the Cybermind project, alongside Wilsdon (ECR), funded by Innovate UK, working with colleagues from Computer Science in Wolverhampton Cyber Research Institute (WCRI), which is developing an intervention to reduce stress among cybersecurity professionals.

4.5 Indicators of wider influence

4.5.1. Public engagement

Our impact is facilitated by a programme of deliberate public and media engagement including offering talks to the general public on topical issues (e.g. social media usage and teenagers), as well as wider dissemination in the media. For example, Fullwood's work on online presence and social media was quoted in Gizmodo, Buzzfeed, NY Magazine, Metro Newspaper and Express and Star; Lloyd was interviewed on ITV for a "National Lottery 25th Anniversary Special" to speak about problem gambling, and interviewed on the topic of "Online fame" and "social media addiction" on Voices of Islam Radio; Platt was interviewed for BBC Crowd Science for her work on humour and gelatophobia; Uther was interviewed by local and national radio stations for her work in digital technologies as well as acting as champion for the Vlogs produced by the CPR during the first UK lockdown at the start of the COVID-19 pandemic. These Vlogs had a reach of 2.3k viewers according to Facebook metrics. Galbraith was interviewed on regional ITV news in 2017 about mental health help-seeking. These media engagements evidence the popularity of our work and allow us to raise the profile of the CPR outside of academia - this encourages interest from students, including postgraduate research students, several of whom applied to study here after learning about our research expertise from media coverage.

4.5.2. Journal Editorships

A number of staff within psychology hold/have held editorial positions on internationally recognised journals allied to their research interests. For example, Chadwick is currently an Associate Editor for the *British Journal of Learning Disabilities* and the *Journal of Intellectual Disability Research* and previously for the *Journal of Intellectual & Developmental Disabilities*; Fullwood has served on the editorial board for *Cyberpsychology, Behaviour and Social Networking*; Platt is Associate

Editor for *Current Psychology*; Bhogal is an Editorial Board member for *Current Psychology* and serves on the Editorial Board for *Basic and Applied Social Psychology*; and Lloyd and Galbraith are Editorial Board members for BJPpsych Bulletin. The majority of psychology staff also act as peer reviewers for journals. Fullwood co-edited a special issue on 'Constructing the Self Online' for *Cyberpsychology, Behavior and Social Networking*. Bhogal edited a special issue on prosocial behaviour for *Current Psychology* in 2019, and Uther edited a special issue on the topic of 'mobile learning for the journal *Education Sciences* in 2019.

4.5.2 Conferences

CRUW has hosted several large international conferences, including the official conference of the International Association of Cyberpsychology, Training and Rehabilitation (iACToR) as well as the 22nd Annual CyberPsychology, CyberTherapy & Social Networking Conference (CYPSY22), which was attended by over 200 academic, governmental, and industrial representatives from 24 different countries. CRUW has also organised and hosted the Social Networking in Cyberspace conference (SNIC), which has previously been held on 3 occasions in 2010, 2013 and 2015. Taiwo co-organised the Psycon Conference in 2017, which considered how the built environment impacts on human welfare. Uther was invited to chair special sessions at HCI International in 2018 and 2019. Fullwood also joined Uther as co-chair of a special session in 2019. Chadwick and Fullwood are involved in coordinating and acting as Scientific Chair respectively for the inaugural conference of the Cyberpsychology Section of the BPS, which has been rescheduled for Summer 2021 due to the COVID-19 pandemic. Post-doctoral researcher Nicklin co-chaired a conference for BERA in 2020 surrounding "Arts Education Redrawn". Nicklin was also on the organising committee for BAICE (British Association of International and Comparative Education) conference 2018 and a co-organiser of a one-day Education and Social Justice Symposium at the University of York in 2016.

4.5.3 Scientific Committees, grant panel participation and other esteem factors

CPR members serve on several high-profile external committees and contribute to the discipline through participation in grant reviews. Uther has served on several scientific committees including IADIS mobile learning, Interspeech, CSEDU conference and IEEE Acoustics, Speech, and Signal Processing (ICASSP). She has served both as a panellist and chair for Athena SWAN accreditation awards, and as a grant rapporteur for EPSRC, ESRC, BBSRC and NIH. Uther has also recently been appointed as Visiting Professor at University of Bedfordshire. Chadwick is a grant rapporteur for MRC, RfPB, ESRC, WWTF, is on the PIMD SIRG Board of IASSID. He was also an honorary research fellow at Manchester Metropolitan University. Fullwood serves as the BPS research board liaison for the cyberpsychology section, Nicklin is a SIG convenor for BERA and Gutteridge served on the AHRC peer review college. The Online Political Discourse Network is also coordinated by Meredith which has 35 academic members from across the globe.