

Institution: Leeds Trinity University
Unit of Assessment: UoA24 - UoA4 – Psychology, Psychiatry and Neuroscience
<p>1. Unit context and structure, research and impact strategy</p> <p>Last names presented in the text adhere to the approach defined below. Mentions outside of these approaches relate to staff members external to the Unit, and/or institution – as specified in the text.</p> <ul style="list-style-type: none"> • Last name: Academic staff member assigned to Unit of Assessment (UoA) 4 on a standard academic (teaching and research) or research only contract (0.2FTE or above) with significant responsibility for research (SRR) as defined by the approved Code of Practice, employed by Leeds Trinity University (LTU) on 31/7/20. • LAST NAME: Academic staff member assigned to UoA4 on a standard academic (teaching and research) contract (0.2FTE or above) without SRR as defined by the approved Code of Practice, employed by LTU on 31/7/20. • Last name: Academic staff member assigned to UoA4 on a standard academic (teaching and research) or research only contract (0.2FTE or above) employed by LTU after 31/7/20 so ineligible for SRR status as per the approved Code of Practice. • Last name: Staff previously employed as Category A eligible but who left the institution before 31/7/20. • Last name: Postgraduate research student as of 31/7/20 and LTU Staff submitted to other UoAs. <p>Section 1. Unit Context and Structure</p> <p>The School of Social and Health Sciences (SSHS) constitutes two departments. The Department of Social and Behavioural Sciences (SBS) (Unit of Assessment 4) and Sport, Health and Physical Education (SHAPE) (Unit of Assessment 24). This overarching structure both encourages and facilitates opportunities for cross-collaboration and interdisciplinary supervision of postgraduate students. SBS is home to our undergraduate programmes in psychology that are accredited by the British Psychological Society (BPS) and award Graduate Basis for Chartered Membership (GBC). This provides a pathway to further postgraduate study and research within the subject area.</p> <p>BPS-accredited Psychology joint degree programmes were established in 1984 (then Trinity and All Saints College) with the first single-honours programme starting in 2001. Aligning with the ethos of research-informed teaching and pedagogy, staff are charged with teaching responsibilities focused upon their individual expertise through research activity. This approach has led to a strong and successful portfolio of programmes that continue to expand (most recently with Counselling Psychology and an MSc Conversion programme).</p> <p>Since UOA4's previous submission to REF (2008), strategies and priorities for research in psychology have been developed to ensure a clear focus on selected key areas of research and coordination of existing research activity. In line with the institutional Research Strategy, the vision within UoA4 prioritises embedding research culture within the Department. This has been facilitated through investment in the postgraduate community resulting in further opportunities for supervision, recruitment of staff to the Unit that are aligned with our strategic aims and strengthen our research themes, and the development of the Pathways model to progression via research activity. The Unit's research, knowledge exchange (KE) and impact activities are coordinated and overseen by the strategic positions of Research Champion (Morris, Webster, Wells) and KE Champion (Webster). These positions are developmental in nature and support the Pathways model for progression. Pedagogical research is further supported by a Senior Teaching Fellow within SBS (TORN) who has a remit to facilitate research in this area. The current REF submission includes 10 Category A staff (10 FTE) (Dalton, De Pretto, Jackson, Downing, Kobzev, Lewis, Morris, Smith, D., Webster, Wells) including 1 FTE Early Career Researcher (Downing). Further research, KE, impact and professional practice contributions exist across</p>

the Unit from several others (CROSBY, EVANS, JONES, *Lawrence*, MCDERMOTT, *St Quinton*, *Stivaros*, *Walkden*, *Whitaker*).

Key aims within the census period:

- **Aim 1.** Increase the staffing base in UoA4, with a focus on recruiting and developing research-active individuals and early-career researchers with complementary skills to research areas relating to our strategic aims (as described later).
- **Aim 2.** Significantly increase the volume of outputs in leading peer-reviewed journals to enable a credible and strong submission to REF2021.
- **Aim 3.** Ensure our research has impact on academic and on user communities.
- **Aim 4.** Increase opportunities for postgraduate study.

The Unit has successfully achieved these aims as evidenced by several indicators. Within the census period, the number of staff in the UoA has increased from 15 (15 FTE) to 21 (21 FTE) as of 31st July 2020, and to 25 (25 FTE) as of March 2021. This increase in staff FTE has enabled the distribution between research, KE, teaching and other activities to be rebalanced across the Department, facilitating increased allocation of time for staff with SRR to produce research outputs. The Unit has successfully moved from a position in REF2014 of submitting zero staff to UoA4 to submitting 10 individuals (10 FTE) to REF 2021. Impact of the Unit's research on academic, practitioner and user communities is evidenced within our two submitted Impact Case Studies (**Jackson, Webster**) supported by outputs in peer-reviewed journals. Finally, our research degrees are currently awarded by the University of Leeds (UoL). Under their regulations, 'Model 1' status is attained by being involved in the successful supervision of a PhD student to completion. Every PGR supervision team is required to include at least one such individual. Since 2014, the Unit has increased the number of staff who have achieved Model 1 status from 1 (SMITH, P) to 7 (**De Pretto, Jackson, Lewis, Morris, Smith, D., SMITH, P., Webster**). Since 2014, 8 Post Graduate Researchers have successfully completed Masters by Research degrees, and staff in the UoA have supervised 7 Doctoral candidates, allowing further contribution to the postgraduate community at LTU, collaborative opportunities (internally and externally) and extension of research themes. Whilst UoA4 has evidenced success, these four key strategic aims continue to be a priority and serve to sustain and strengthen the vitality of the cohesive research community that has developed within the census period.

Coupled with these aims are underpinning research themes in '**Applied Health Psychology**', '**Cultural and Cross-Cultural Psychology**', and '**Education and Pedagogy**', which facilitate a targeted approach to the application of psychological theory and methods that underpins all research within the Unit, and each allows for collaboration between themes and across disciplines, most notably with UoA24. These overarching themes are summarised below (in order of the number of outputs submitted to REF2021) and are further unpacked in later sections.

Applied Health Psychology

Areas of research within this theme and their respective contributing staff members include: Resilience (MCDERMOTT, *Stivaros*, **Webster**), Tinnitus (**Jackson**), Nutrition and Eating Behaviour (**Dalton**, JONES) Vulnerable populations (CROSBY, *Cruickshank*, EVANS, **Kobzev, Lewis, Webster, Wells, Whitaker**) and Health Behaviour Change (*Lawrence*, **Morris, Smith, D, St Quinton**). Research activity includes interdisciplinary collaborations with for example UoA24 (**Dalton**, Beaumont), external partners (e.g., Phonak, Specsavers, Ad:Venture, Together Women) and research institutions both nationally (e.g., UoL) and internationally (The Russian Academy of Natural Sciences). The future aim is to establish UoA4 at LTU as a regional centre of excellence in applied health research.

Cultural and Cross-cultural Psychology

Research within this theme reflects international collaboration and the reach of the members. It is principally concerned with psychological experience and emphasises an understanding of how culture influences this. Specifically, this topic relates to the validation of psychological measurement tools (**De Pretto, Lewis**) and psychological experience (**De Pretto, Kobzev, Lewis**). The aim of this theme reflects a direct attempt to make observations, comparisons, and relative improvements to individuals from diverse cultural backgrounds (**De Pretto, Lewis, Kobzev**).

Education and Pedagogy

This recently emerging and timely theme (given the current COVID-19 context) is led by **Downing** and Senior Teaching Fellow TORN. As per Aim 1 in the Key Aims section above, the Unit has strategically recruited Early Career Researchers (ECRs) who could contribute to the research themes within the Unit. **Downing's** programme of research has resulted in improved literacy outcomes in Key Stage 2 pupils, and the development of spelling and handwriting legibility measure for educators and clinicians. The theme is also developing several areas of pedagogical research including the student experience (**EVANS, Webster**), innovation in teaching pedagogy (**JONES, Morris**), and service provider education (**De Pretto, Webster**). The aim of this research theme is to enhance the student educational experience through research informed teaching and pedagogy.

Staff within UoA4 (**De Pretto, Kobzev, Lewis, Morris, St Quinton, Webster**) have collaborative relationships with institutions across the world, including Australia, Canada, Italy, New Mexico, Pakistan, Russia, Hungary and Malaysia and this international reach is reflected in several of the submitted outputs as well as the affiliated impact case studies. More information about these collaborations is presented in Section 4. The cross-cultural psychology research conducted within the UoA informs the teaching of undergraduate programmes and forms an integral aspect of our commitment to providing an experience that is inclusive of students from all backgrounds. This, in turn, helps us to deliver on key university priorities, including the fulfilment of the Race Equality Charter.

Research Objectives Over the Next Five Years

In the period since REF2014 we have grown our research capacity in UoA4 enabling a move from non-submission to REF2014 to submitting 10 individuals to REF2021 including two impact case studies.

The objectives of the Unit for the next five years will be to support the University in its strategic aims to further embed a culture of high-quality research, KE and impact activity, and to achieve Full Degree Awarding Powers via the award of the right to award Research Degrees (RDAP). Our objectives are:

1. Increase the number of research-active staff by expanding existing research strengths through sustainable new academic appointments made in carefully selected research fields and recruiting, developing, and retaining high-calibre academic staff.
2. Support staff who have a developing publication record, to facilitate their writing for internationally recognised peer-reviewed journals. Strategic positions such as the Research Champion roles and Research Mentor will provide this opportunity for development.
3. Continue to run research study days to facilitate collaboration on funding applications, and to encourage researchers to engage with academic training and development workshops.
4. Develop the careers of our researchers by fostering a dynamic research culture across the unit. This will be achieved through the facilitation of research and collaboration via the targeted research themes of the UoA, as well as the increased opportunity for developing supervisory skills under the mentorship of Model 1 supervisors. It is further supported through the Pathways model to progression provided by the Institution.

5. Continue the growth of a strong postgraduate research community with high completion rates, thus supporting the University's strategic aim to achieve RDAP. A key element of this will be a direct result of Aim 4 which aims to increase opportunities for staff to be involved with supervision of research students.

6. Increase the external research and consultancy income generated by the UoA. Research Champions will work to facilitate collaborative opportunities both within the UoA, across disciplines and externally to develop strategic partnerships. Research and KE events such as those previously held (further detailed in Section 4) will seek to engage new stakeholder and develop existing relationships.

7. Further develop collaborative links with researchers at other Higher Education Institutions, both within the UK and internationally. To achieve this, we will support staff in attending conferences and events to disseminate research findings and facilitate networking opportunities.

The Facilitation of Impact

Fundamental to our development has been the extension of research partnerships and networks regionally, nationally, and internationally. As our research capacity has grown over the last census period, researchers have focused on areas of psychological research likely to have impact in the longer term. We recognise that the impact of research activities and outputs takes some time to come to fruition but have taken the strategic decision to increase research capacity in key areas (as per the themes outlined above). These areas will provide benefits to the wider community including society, culture, health, the environment, and quality of life, beyond academia.

In allocating additional time for individuals to engage with research, consideration is given to the nature of the research and its potential for the extent and nature of the impact. This has allowed for the submission of two impact case studies within the Unit that exemplify the potential for impact of our research. **Jackson's** impact case study based on his programme of research on tinnitus highlights the impact of his research on practitioner's ways of working and service users' quality of life and management of tinnitus distress. Strategic partnerships have been developed with a global hearing aid manufacturer in Switzerland and Hearing Power in Australia. The second submitted impact case study is based on **Webster's** programme of research into student mental health. This impact case study details the design and development of resilience-based training that evidences impact on the health, wellbeing, and quality of life of individuals and members within the public, private and third sector, with reach extending to Italy and Australia.

Research funding is sought to support impactful research. For example, **Jackson** is part of an international team that secured \$AUS 50,000 Global Connections Fund Bridging Grant from the Australian Academy of Technology and Engineering. Staff within the Unit who have a successful track record of securing external funding provide guidance to ECRs through mentoring and delivery of departmental workshops on applying for external funding. In addition, a subject specific database of funding bodies is accessible to all staff.

We intend to focus our efforts on building on our successes in securing research funding in areas related to applied health research. In doing so, we recognise a need to be ambitious while remaining realistic about the scope and magnitude of the types of grants we may be able to attract in the short-medium term.

Interdisciplinary Research

As detailed above, our Applied Health Psychology theme is active in several areas specific to the discipline of psychology. However, the nature of the theme also allows for collaboration beyond the field of psychology, most frequently with UoA24. Not only does this approach secure supervisory capacity, but such approaches allow new research methods to be added to the investigations being undertaken and facilitate the development and thinking of PGRs and staff alike. For example, investigating the effects of transcranial direct current stimulation in sedentary and overweight people involves both a UoA4 staff member (**Dalton**) as well as colleagues working in UoA24 (Barwood, Russell, Davis) who have combined expertise in physiology and behaviour

change. Such collaborative supervision arrangements (supervising Beaumont) have facilitated an interdisciplinary approach to exploring the neurophysiological correlates of eating and exercise behaviour, such that the topic is holistically investigated from the perspectives of several separate but complementary disciplines.

These types of interdisciplinary collaborations are facilitated by the overarching structures of the SSHS, in which both UoA4 and UoA24 are located. Shared structures around research, including a School Research Ethics and Integrity Committee and regular School Research Seminars facilitate this interdisciplinarity.

Open Research Environment and Reproducibility

Supported by dedicated Library staff, and recognising the benefits to the public and external stakeholders of unrestricted access to research outputs, UoA4 operationalises the University's Open Access (OA) approach (<https://www.leedstrinity.ac.uk/media/site-assets/documents/key-documents/pdfs/open-access-policy.pdf>) primarily via the green OA route linked to the University's acquisition of the PURE repository. Such practice ensures that the Unit's research and KE outputs are openly available and accessible while facilitating rapid dissemination, and increased engagement by partners, stakeholders, beneficiaries, professional practitioners, and the wider public.

The Unit also supports OA funding requests from a central budget with preferential outcomes being favoured for manuscripts submitted to journals where authors are required to make study protocols, datasets, and codes available on publication. An example of this is **De Pretto's** outputs in PLoS One. The Unit also endorses (where possible) the inclusion of specific reliability studies in the theses of the PGRs supervised by its staff. UoA staff are therefore actively encouraged to enhance the reproducibility of their research.

Research Ethics and Integrity

In UoA4, we are committed to supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice, and support for the development of research active staff and students. This is underpinned by the British Psychological Society's Code of Human Research Ethics, with which all researchers working in UoA4 are familiar.

Creating a "healthy" research culture is key to preventing lapses in research integrity and helps to ensure that a career in research with the Unit is attractive to those who value rigour, accuracy, honesty, and transparency. The SSHS Research Ethics and Integrity Committee has oversight of staff and postgraduate research projects, reports up to the University's Research Ethics and Integrity Sub Committee and into the SSHS School Board. It is currently chaired by **Webster** and the membership includes other members of UoA4 (CROSBY, **Morris**, St Quinton) as well as colleagues from other areas of research, including UoA24. Where possible, membership of this committee also serves as a developmental opportunity for ECRs who are then mentored through processes and procedures related to the committee. Training on research ethics and integrity is also embedded in all our undergraduate programmes and is a mandatory requirement for the Unit's PhD candidates.

2. People

Staff Development Strategy

The Unit provides a vibrant, supportive, and collaborative research environment to facilitate staff and Postgraduate Researchers (PGRs) to flourish in their strategically aligned research and impact activities.

For appointment to Lecturer or Senior Lecturer posts on the standard academic contract, a completed or near-completed PhD is an essential requirement, along with ongoing research activity and/or professional experience. Staff on this standard contract are allocated a percentage of their time to research and KE activities, with opportunities for additional hours to be allocated during annual performance review. As of the census date we have a structure consisting of 1 HoD, 1 Senior Teaching Fellow, 8 Senior Lecturers, 9 Lecturers, 1 University Teacher, and 1 Graduate Teaching Assistant/Technician. This range of experience and skills enables us to

provide research and impact career development opportunities for all staff, including mentoring for junior, and development of leadership roles for senior staff. Opportunities for promotion to Reader and Professor are offered on an annual basis, supported by the institution's 'Pathways' career planning framework, as explained in the Institutional Level Environment Statement.

At Unit-level, a senior mentor is assigned to new staff members to advise and inform on day-to-day aspects of the role. Research and impact-specific mentoring is primarily offered by **Webster** and **Morris** and facilitates orientation with ethical review processes, university-wide internal funding calls, planning and capturing impact, and research repository training, with additional training provided as require. Staff development funds (i.e., for training, conferences, professional development) are provided through a competitive bidding process within SSHS and are funded strategically from central research accounts. Start-up costs, minor consumables and specific pieces of capital equipment can be negotiated on a case-by-case basis with the SSHS board on which there is significant representation by staff from UoA4.

Unit staff are eligible to compete for institutionally funded PhD studentships and the University also supports match-funded PhD student programmes that are targeted at those staff in receipt of external research funding or significant benefit in-kind. More experienced staff can draw on peer-mentoring at the many internal development events delivered by the Unit (SSHS Research Engagement Seminars, Research Days, Away Days). LTU is not currently a signatory of the Concordat to support the Career Development of Researchers but the Unit adopts the principles thereof as mentioned in the University Research Strategy (2018-2021).

A number of staff have also contributed to the development and progression of PGRs through examination including MbRs, MPhils, DClinPSy, and PhDs both nationally (numbering 7; CROSBY, **Dalton**, **De Pretto**, JONES, **Morris**, **Webster**, Wells) and internationally (Australia, **Webster**; Malaysia, **De Pretto**; Pakistan, **Lewis**). Supervisory responsibilities for MbRs total 5 (**Jackson**, JONES, **Lewis**, **Morris**, **Webster**), 2 DClinPsy (CROSBY, **Smith, D**) and 9 PhDs (**Dalton**, **De Pretto**, **Morris**, **Lewis**, TORN, **Smith, D.**, SMITH, P., **Webster**, Wells).

Appointment Policy

Since REF2014, LTU management has facilitated the expansion of research capacity and activity in Psychology with a substantial number of staff being recruited. A natural turnover of staff over this period has also provided an opportunity to strategically recruit staff to strengthen research in the key areas identified in Section 1 (i.e., Applied Health Psychology, Education and Pedagogy, and Cultural and Cross-Cultural Psychology). Overall, there are now 10 more FTE staff working in Psychology than there were in 2014 and we have developed research activity to the point at which 10 staff (10FTE) are submissible to the current REF.

Each of the three research themes identified in Section 1 (Applied Health Psychology, Education and Pedagogy, and Cultural and Cross-Cultural Psychology) have been supported with strategic appointments with an emphasis on applied psychology and knowledge exchange. Several of the more recent appointments have been ECRs in the final stages of completing their PhDs at their respective host institutions. This has been a strategic approach to infuse the subject area with fresh ideas and opportunities in a department seeking to continue to rapidly develop its research profile and impact. We are keen to help our staff to develop their research profiles as much as possible and to enable them to build successful and productive research careers with us.

In 2019 two staff were identified as showing promise in terms of research leadership by the Head of Department and given the remit of being Research Champions for UoA4 (**Morris** and **Webster**). Their primary function is the promotion and coordination of research activity and the preparation of the REF submission for UoA4, alongside their existing duties as Senior Lecturers.

A central component of our continuing strategy is how current colleagues will play a major role in our success over the forthcoming years by securing grant income, developing their own research sub-themes, and conducting academically rigorous work with measurable impact on scholarship and society. It is therefore important to the Unit's sustainability and succession planning that 100% of eligible staff FTE are on permanent open-ended contracts.

Provision of research support

All lecturing staff appointed at early career stage benefit from an enhanced package of support for research. This includes:

- i) Reduced teaching loads in their first year to allow research development time, alongside a clear focus at 6 monthly Performance reviews with line managers focusing on ambitious yet manageable goals to develop their research profiles.
- ii) Funding to facilitate conference attendance including travel costs.
- iii) Pairing with an experienced mentor who provides advice about all aspects of research and publication, which is more often in addition to their academic mentor.
- iv) Training and development of staff is also provided through the University's Staff Development Programme, including annual appraisal to record individual needs.
- v) The recent appointment to the Chair of the school ethics committee (**Webster**) ensures a strong and continued involvement of Psychology in the management of ethics in the school. This complements staff from Psychology who currently review on this committee (**Morris**, CROSBY) and includes membership of an ECR (**St Quinton**) for developmental purposes. Monthly ethics advice sessions are held for prospective research ethics applicants who may need some additional support prior to submission to the committee for review.
- vi) Funding to enable KE opportunities.
- vii) Access to the Research Support Scheme which is a seed fund designed to allow researchers to explore avenues of inquiry prior to more substantial external funding calls.
- viii) Capital bid funds application which can be used for the purchase of equipment for specific projects.

Recognition and Facilitation of Research and Impact Activities

Within the Unit of assessment there are a variety of avenues through which the research process is developed and facilitated. **Morris** and **Webster** act as Research Champions the purpose of which is threefold. Firstly, to serve as an initial point of contact for staff requiring guidance on developing a research project. Secondly, with both Research Champions being members of the School Research Ethics and Integrity Committee they are also able to provide specific guidance around the ethical review process. Finally, the Research Champions act as mentors to ECR's looking to develop their programme of research and gain experience in postgraduate supervision.

UoA24 organise monthly School research seminars wherein staff and PGRs from within the School can present their current research for developmental and collaborative purposes. UoA4 is a consistent and valuable contributor to these seminars and aids the process through advertisement and recruitment.

To further facilitate research activity and collaboration, a quarterly UoA4 newsletter is disseminated to staff and PGRs within the School (**Morris**). This highlights recent outputs and opportunities for cross-collaboration. Information is then shared externally via the Institution's media outlets and professional channels.

Recruitment of Postgraduate Research Students

The Unit has benefited from 6 fully university-funded PhD studentships and has offered 11 discounts to MbR registration for individuals who have previously been awarded high grades at undergraduate level (13 out of 21 applicants eligible for fee reduction).

Successful PhD awards:

The Unit has contributed to 1.5 FTE doctoral degree awards (Kemplay-Adhikari in 2017 supervised by SMITH, P., and Elmer; St Quinton in 2019 supervised by Barwood and **Morris**).

The Unit has also contributed to the supervision of doctoral candidates external to the Institution (Durham University, **Webster**; UoL, **Dalton**) as well as supervision of practitioner-based awards (DClinPsy; CROSBY).

Successful MbR awards:

Since academic year 2013/14, the Unit has also graduated 7 MbRs all of whom received fee waivers. Namely, Clarke (supervised by **Jackson** and **Smith, D**), Edwards (supervised by SMITH, P., and **Jackson**), Kenworthy (supervised by SMITH, P., and **Jackson**), Mitchell (supervised by Russell and Wells), Papworth (supervised by SMITH, P., **Jackson** and TORN), Player (supervised by SMITH, P., **Jackson** and **Morris**) and Woolmer (supervised by **Jackson** and Stivaros).

Ongoing:

As of July 2020, there were 6 PGRs in UoA4 at doctoral level (Full Time: 2; Part Time: 4). Namely, Fraser (supervised by Barwood, TORN and WOODFIELD), Czyzewska (supervised by **Dalton** and **Jackson**), Maskeen (supervised by **Webster**, **Smith, D.**, and Stain), Matthews (supervised by **Webster** and Stain), Tarrant (supervised by SMITH, P., Elmer and TORN) and VILARRUBI (supervised by SMITH, P., Elmer and TORN), with 4 in receipt of fully funded stipends/scholarships.

A further 5 MbRs are currently studying (3 with fee waivers; 2 self-funded). Namely, Harris (supervised by SMITH, P., and MCDERMOTT), Kumbani (supervised by **Lewis** and Owen), Mistry (supervised by **Webster** and **Jackson**) and Murphy (supervised by TORN and Rowley).

Monitoring and Support for Postgraduate Research Students

As detailed in the institutional environment statement, there is significant institutional support for PGRs in terms of induction, training, facilities, monitoring and supervisory support. As stated in Section 1, at the outset of the census period for REF2021 Psychology had a single supervisor eligible to act as Lead Supervisor under UoL regulations. This has now increased to seven following successful supervision of PhD candidates to completion. This represents a sizeable change in the volume and quality of supervision that can be offered through the UoA4, which is commensurate with an equivalent increase in postgraduate research activity. This increase has also led to interdisciplinary supervisory teams with UoA24 (**Dalton**, **Morris**) and UoA23 (**Webster**).

We are committed to ensuring that Research Students within UoA4 are provided with opportunities for development over-and-above those set out by the University e.g., PGRs are strongly encouraged to contribute to the School of Social and Health Sciences research seminar series, where they can showcase their work to existing more experienced staff in a productive and encouraging environment. In 2018 the institution hosted Nuffield Foundation students who were awarded placements within Higher Education institutions to gain experience in academia/research. PGRs (Maskeen; Matthews) were given the developmental role of supervising the students throughout their placement. Our PGRs have also assisted in internal research events (e.g. The Virtual Reality Summit) and have presented their work at internal research conferences (St Quinton, Kenworthy, VILARRUBI).

We develop research students with an in-depth knowledge of their topic and the broader context within which their research is placed as evidenced by acceptance of abstracts at national and international conferences detailed above. High quality training in research methodology provided by the Unit's supervisory staff, the University's central resources, and ad hoc support as necessary allow for tailored training via the live training plan document required for each PGR. All PGRs receive a structured induction process which included research ethics and integrity training (see Section 1), further details of this process can be found in the institutional statement. When PGRs commence their programme of study within the Unit they are encouraged to contribute to the PGR community via forums and collaborative working practices that emulate the ethos of collaborative working within the department and serve to provide developmental

opportunities for all. For example, Maskeen and Matthews have collaborated on several systematic reviews currently under review, and Matthews has formally presented findings from his studies so far to inform subsequent research by Kenworthy

The Unit endorses and implements the requirements of PGR supervision outlined by the Research Degree Handbook (<https://www.leedstrinity.ac.uk/media/site-assets/documents/key-documents/pdfs/research-degree-handbook.pdf>). Where necessary, discretionary central funds are used each year to help research students attend national conferences (Maskeen, St Quinton) and international conferences (Matthews), purchase project-specific consumables, or to support those towards the end of their projects who require (due to unforeseen circumstances, such as COVID-19) short extensions of funding to write-up. A purpose-designed office space provides workspace and computing facilities for up to 16 postgraduates and post-doctoral researchers.

Equality and Diversity

The ethnic diversity of the Psychology staff and the strong focus on equality of opportunity in both learning and research are cornerstones to the discipline we share. The University has published codes of practice for promoting equality, diversity, and inclusion, and has recently been awarded the Bronze Race Equality Chartership (REC) award. It is worthy to mention the contributions of one member of Psychology staff (TORN) and one of our PhD candidates (Maskeen) were instrumental in the University's application and staff development strategy. Maskeen was the operational lead for the REC, the role of which was to identify institutional and cultural barriers that exist which hinder the success of Black, Asian, and Minority Ethnic staff and students at the institution. The role that Maskeen had was also to analyse the institutional data, collection of data via focus groups and the development of an action plan to eliminate racial inequalities.

The selection of outputs for inclusion in UoA4 has at its heart reflected upon equality and diversity advocacy. There are three elements whereby this can be demonstrated in this submission and outputs of submitted staff. Namely, in the cross-cultural research theme (De Pretto, Sang-Ah Park), the fostering of inclusive educational environment (EVANS, Downing, Rowley, TORN, Webster) and a focus on specialist populations in the context of health (CROSBY, Jackson, Kobzev, Lewis, Morris, Smith, D, St Quinton).

At the centre of the university's strategy towards equality there are five Staff Equality Networks, of which three have Psychology committee membership. The Department strives in sexuality and gender equality issues through its LGBTQ+ representation (Cruikshank). Through the Disability+ Network there is support for staff with disabilities to enable them to have productive working conditions (Jackson). The International staff network lead is shared (De Pretto). As per the University's Code of Practice, all staff involved in the Unit's decision making for REF2021 have completed REF-specific Equality, Diversity, and Inclusion training.

Supporting Wellbeing of Staff and PGRs

The Unit supports the University's ambitions (stated in the People Plan 2018-2021: <https://www.leedstrinity.ac.uk/media/site-assets/documents/key-documents/pdfs/people-plan.pdf>) to recognise the link between the wellbeing of our staff and students and our overall success. Accordingly, resources are provided to encourage and inspire our people to pay attention to their health and wellbeing. The HR department offer Wellbeing activities through access to the Employee Assistance Programme, offering advice on a range of issues including employment, health, relationships, and finance. Staff in psychology offer support to the activities offered via HE wellbeing programmes on an ongoing basis including physical activity classes (Morris) and sessions that promote mental wellbeing (Webster).

The University has arrangements for supporting flexible working for those with caring responsibilities. Since the COVID19 pandemic, support has been put in place for remote working, and it is hoped that this will continue to be made available as a way of facilitating productive research activity alongside University-level provision of virtual research channels. In addition, a formally designated area within Microsoft Teams was developed by TORN to support staff wellbeing and share effective practices in online teaching methods across the University.

Notably, across the University, approximately 10% of employees are trained and accredited Mental Health First Aiders. Within UoA4, there are four Mental Health First Aiders (**Dalton, De Pretto, Jackson, TORN**). Furthermore, the Unit encourages the institution's use of the Employee Assistance Programme. As part of the Mindful Employer network, the University is also a signatory to the Charter for Employers who are Positive about Mental Health facilitating stress management workshops or wellbeing sessions, timely access and local support for staff during sickness absences, training for managers to tackle mental health issues as they arise and sharing of best practice between local businesses when working to minimise the impact of mental ill health at work.

UoA4 promotes the University's Protection of Dignity at Work and Study Policy (<https://www.leedstrinity.ac.uk/media/site-assets/documents/key-documents/pdfs/protection-of-dignity-at-work-and-study-policy.pdf>) in order to provide a working and learning environment which is free from harassment, including bullying and unfair discrimination. Within UoA4 it is expected that all individuals will be treated with respect and consideration given that harassment can be detrimental to performance, morale, confidence, health and learning of those who are affected by it. Similarly, the University's Student Mental Health Policy (<https://www.leedstrinity.ac.uk/media/site-assets/documents/key-documents/pdfs/student-mental-health-policy.pdf>) of which **Webster** was on the working group, dictates the Unit's approaches to PGR mental health provision. **Webster's** programme of research also supports the continued development of strategies to identify and address student mental ill-health as detailed further in the impact case study. Other staff within the Unit (**Jackson**) have also contributed to the provision of materials to support student mental health during their studies

3. Income, infrastructure and facilities

Infrastructure and Facilities

Within the REF census period the institution has invested £121,190 in the infrastructure and facilities available for UoA4 that relate to research and impact activities in the following ways:

Space:

- Offices related to UoA4 are in two buildings on campus. 55% (12) are near the computer laboratories, 2-way observation laboratory and eye tracking facilities. The remaining offices (10) are located close to the cold pressor laboratory, library, and shared teaching spaces.

Experimental equipment including:

- Cold pressor equipment (internally funded to the sum of £1,700).
- Observation laboratory consisting of three rooms with cameras and a room housing the central control desk for monitoring and recording (£13,000).
- Tobii Pro Glasses 2 Mobile Eyetracker (£15,000).
- Psychology shares access to equipment held within UoA24 including (but not limited to) automated motion-tracking equipment and exercise physiology laboratories which facilitate cross-collaboration research activities.

IT resources:

- SPSS (£4111).
- E-prime (£18,185).

Staff in UoA4 also have full access to JISC Online surveys (university site license) and N-Vivo (university site license) software packages.

Scholarly equipment:

- Access to 967 Psychology journals
- Access to 6 databases including (PsycARTICLES, PsycINFO, PsycTESTS, EBSCO Psychology and Behavioural Sciences Collection, ScienceDirect and MEDLINE).
- A total of £15,820 annual investment in psychology books and a total of £53,374 for the above electronic content.

PhD funded studentships:

- The university has invested in one fully funded PhD studentship due to be completed in 2021 (**Matthews**). A second PhD student is funded through work related to the university Race Equality Charter (**Maskeen**, part time; due to submit 2024).
- There have been 2 PhD candidates on Graduate Teaching Assistant contracts (**Kenworthy**, **VILARRUBI**) the latter of which is now on a standard academic contract as a Lecturer.

Funded conferences

- Three funded conferences (detailed in Section 4).
- Funding (~£9,000) to attend national and international conferences.
- Erasmus funding has facilitated staff mobility to attend other host Universities (**De Pretto**, **Sang-Ah Park**, **Webster**).

All experimental equipment and IT resources are openly available to postgraduate researchers and academic staff. Undergraduates and taught postgraduates also have access for the purposes of supervised research projects. Participation in research is encouraged within the Department through the Research Participation Scheme wherein students are permitted access to a pool of participants who have signed up to the scheme. Experimental equipment such as the cold pressor is used by research active staff submitted to the UoA (**Jackson**), MBRs (**Woolmer**) and PhD students (**Kenworthy**). PGRs have frequently continued their studies from undergraduate level (e.g., **Kenworthy**) highlighting continuity of collaboration and the strengths of the associated programmes of research. Online survey software has also facilitated national (e.g., Huddersfield University) and international (e.g., University of Bozen-Bolzano) research collaborations. Investment in continued professional development for staff specifically related to research has also been a means by which research and impact activities can be progressed. For example, one academic staff member (**Webster**) completed research leadership training with the Leadership Foundation at a cost of £1000. This has resulted in the progression of the staff member to Primary Investigator on several research projects and mentor to ECRs within the unit. Academic staff have also had access to a bid writer to develop funding bids to external organisations.

External funding sources

We have begun to develop a profile of successful bids for funding from external bodies. Two funding calls have been awarded by the British Tinnitus Association to the sums of £1,000 and £2,000 (**Jackson**). £257 was awarded by the Tai Chi Union of Great Britain (**Morris**). Finally, £3,255 was awarded through Erasmus to facilitate research collaboration with colleagues across Europe (**De Pretto**, **Webster**).

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

Staff in UoA4 possess a wealth of expertise across a broad range of research themes. Recognition of this expertise is evidenced through guest editorship (Memory, Mental Health, Religion and Culture; **Wells**, **Lewis**), copy editing (Language and Learning; **Downing**) and membership of editorial boards (Journal of Beliefs and Values; Psychology Teaching Review; JONES; **Lewis**). Staff have made significant contributions to the research base through the review of manuscripts submitted to national and international journals (**Dalton**, **De Pretto**, **Downing**, JONES, **Lewis**, **Morris**, **Smith, D.**, **Webster**, **Wells**) and reviewing grant applications (National Institute for Health Research programme grant; **Webster**). In total staff have contributed to key peer reviewed journals in fields ranging from clinical health, culture and environment and education (CROSBY, **Dalton**, **De Pretto**, **Downing**, **Jackson**, JONES, **Lewis**, MCDERMOTT, **Morris**, **Webster**, **Wells**), five books (**Lewis**; TORN), three published book reviews (**Lewis**) and two invitations to contribute to special issues (Cognition and Education, **De Pretto**, **Webster**).

Staff within the Unit have organised internally funded national conferences based on their research within the Applied Health Psychology research theme (**Morris**; **Jackson**; **Kennedy**; **Stain**; **Webster**; **Wells**). These internally funded national conferences placed no charge on attendance to promote inclusivity for interested attendees. The aims of each conference are briefly outlined below:

The 'Tackling Tinnitus conference' (**Jackson, Morris Wells**; March 2017) was a one-day event timed to coincide with National Tinnitus Awareness Week. The project sought to provide a forum for tinnitus researchers, healthcare providers (e.g., NHS audiologists and General Practitioners), and tinnitus patients. It promoted Psychology within the local community, enhance multi-disciplinary research opportunities/networks. The event was internally funded to the sum of £750.

The 'Virtual reality summit' (**Webster, Stain**, June 2017) was a one-day event aimed at supporting the education and research activities of the university across multiple disciplines including psychology, education, and sport. The event facilitated the exchange of knowledge and skills between researchers, educators, service providers, students, and the community. The event informed the community about the potential and the application of virtual reality as a tool for intervention as well as giving hands on experience. The event was internally funded to the sum of £3480.

The 'Social and emotional wellbeing of students: 'The SoWise Vision Day' (**Webster, Stain**, June 2017) brought together key stakeholders in student mental health. The aim of methods for supporting the social and emotional wellbeing of university students. The event was funded to the sum of £4324.

The 'Health and Psychology conference' (**Morris, Kennedy**, June 2018) was a one-day event designed to showcase the research and offerings for external consultancy work from Psychology in health. This conference also aimed to develop greater reach between researchers, the public and statutory and third-sector health providers. The event was internally funded to the sum of £2500.

The conferences briefly outlined above highlight the support and facilitation of research activities that aim to reach across communities and the wider society. The conferences attracted notable researchers within the respective fields both nationally (Dr Lucia Valmaggia, Institute of Psychiatry, KCL, London) and internationally (Dr Wim Veling, Uni Groningen; Dr Roos Pot-Kolder, Vrije Universiteit, The Netherlands). In addition, key charitable organisations engaged with the events (e.g., The National Tinnitus Association; Student Minds; Together Women; YoungMinds) and outputs for the 'Health and Psychology' conference were presented at the Division of Health Psychology, British Psychological Society (**Morris**). Such conferences are also shown to be key to developing the programmes of research for staff members and extending the potential reach and significance. This is evidenced in the two impact case studies submitted by the Unit which details the contribution of these events ('Tackling Tinnitus' and 'SoWise Vision Day') to the impact of the underpinning research.

12 international conference presentations in the Unit range across several countries (Australia; Austria; Canada; Czech Republic; Indonesia; Italy; Malta; Poland; Portugal; Russia; Sweden; USA). Invitations to act as Senior Scientific Advisors (**De Pretto, Webster**) to the Cognitive Sciences Arena Conference in Italy (2020) reflect the international reach of staff expertise. Finally, contributions have also been made to national conferences organised by the UoA's professional body The British Psychological Society (**Jackson, TORN**).

Within the unit, three staff have held esteemed positions on national committees for academic, non-academic and charitable organisations linked to the individuals' research interests and values of LTU (Forces in Mind; **Jackson** Together Women; TORN, VILARRUBI, MCDERMOTT). Engagement across a diverse range of audiences and communities is evidenced through outreach and consultancy work nationally (EU-funded Ad:Venture; Betsi Cadwaldr University Health Board; GwE North Wales Regional Improvement service; St Mary's and St Giles' Centre; Together Women; Paediatric Occupational Therapy Team, **Downing; Jackson; Lewis; MCDERMOTT, TORN**) and internationally (University of Bozen-Bolzano, **De Pretto, Webster**). Research collaborations with external organisations include the NHS (**CROSBY Jackson, Webster**), the Ministry of Defence (**Webster**). Collaborative relationships exist with research institutions spanning nationally (Huddersfield University; Manchester University; University of Oxford; University College London) and internationally (Australia; Italy; Malaysia; Russia).

Visiting positions of staff number four including collaborations with Durham University (**Webster**, 2016-2017), The UoL (CROSBY, 2010 to date; **Dalton**, 2017- to date); The University of Nottingham Malaysia (**De Pretto**, 2017-date), the University of Warwick (**Lewis**, 2018-2019) and Bashkir State University Russia (**Lewis**, 2015 to present).

Academic staff form membership of national learned societies at various levels of esteem including Associate Fellows of the British Psychological Society. One staff member (**Dalton**) holds membership in other esteemed national learned societies and associations (Association for the Study of Obesity; Member of the Society for the Study of Ingestive Behaviour) and others are members of international learned societies (International Association for Cross-Cultural Psychology; Albo degli Psicologi del Veneto Psychologists album of the Veneto region Italy, Member of the Asian Association of Social Psychology, and Foreign Honourable Member of the Polish Society for the Psychology of Religion and Spirituality; **De Pretto**, **Lewis**).

Contributions to Society

Specific examples of contributions to society that staff from the submitting Unit have made include:

- A programme of research focusing on developing and evaluating effective therapies for people with substance use problems has led to the development of the Brief Addiction Therapist Scale (BATS). This evidence-based tool allows for monitoring and evaluating therapists' delivery of psychological therapies used in routine practice for alcohol and drug use problems. The tool is being used to support peer supervision at an NHS addiction service and is available for use at <https://www.result4addiction.net/> (CROSBY based on published PhD work).
- An ongoing multisite project evaluating the effectiveness of a web-based intervention on the well-being of undergraduate students. This project is in collaboration with esteemed researchers in Australia and the UK. The project will contribute to the international evidence base exploring how we can effectively intervene to improve well-being and mitigate against heightened levels of psychological distress in university students (CROSBY, **Webster**).
- An international research collaboration focusing on project The Southeast Asian haze crisis serves to inform policy maker responses to haze to align with public opinions, behaviours, and/or values. This research sheds new light on the importance of accounting for public opinions and values in promoting mutual understanding and cooperation on haze-related policy responses among societies in Southeast Asia (**De Pretto**).
- A cross-disciplinary, international project seeking to validate an innovative virtual coaching app entitled "Tinnibot" for tinnitus patients alongside the University of Auckland (New Zealand) with Dr Fabrice Bardy and Macquarie University (Australia) with Dr Matthieu Recugnat (**Jackson**).
- A continuing body of work that has examined and developed health behaviour interventions related to several key health behaviours including smoking, binge drinking and physical activity with the UoL through Professor Mark Conner (**Morris**, **St Quinton**) and Dr Andrew Prestwich (**Morris**). Internationally this work is collaborative with Mexico State University through Professor David Traffimow (**Morris**, **St Quinton**) and the University of Victoria (Canada) through Professor Ryan Rhodes (**Morris**, **St Quinton**).
- In 2019 a collaboration was forged between LTU and the University of Bozen, Italy. This was facilitated through an Erasmus grant that funded two colleagues (**De Pretto**, **Webster**) appointments to be Senior Scientific Advisors at the Cognitive Sciences Arena Conference at the University of Bozen-Bolzano in February 2020. Following the success of this De Pretto and Webster were then invited to deliver in-depth online seminars to students at the University of Bozen-Bolzano in December 2020. In addition, a cross-national research study was developed. This collaborative research evidences the

international reach of the programme of research detailed in one of the Unit's submitted impact case studies (**Webster**). Furthermore, this collaboration has also led to LTU and the University of Bozen-Bolzano establishing Erasmus placements between the two institutions which are due to commence in 2021.

- The development and roll out of an online literacy and learning programme during interruptions to schooling during Covid-19. A Welsh version of this programme has now been developed. This work has led to the provision of key language and literacy skills to support and improve literacy skills during a time of international crises. This directly improves educational outcomes for children and will lead to a narrowing of the gap in attainment caused by the Covid-19 pandemic. More generally, the programme will serve to improve literacy outcomes in Key Stage 2 pupils (**Downing**).
- In collaboration with North Wales schools and Betsi Cadwaldr University Health Board (BCUHB) research examined spelling and handwriting difficulties in children with dyslexia and/or developmental coordination disorder (DCD). Working with BCUHB Paediatric Occupational Therapists led to the development of spelling and handwriting legibility measure for educators and clinicians (**Downing**). Findings from this research will lead to better (and earlier) identification of handwriting difficulties leading, in turn, to earlier intervention and better educational outcomes.
- The Unit can also demonstrate important links to Pakistani, Russian, Welsh, Irish, Hungarian (**Lewis, Kobzev**) and Malaysian populations (**De Pretto, Sang Ah Park**, 2017-2019). **Lewis** holds a Distinguished Visiting Professor position at Bashkir State University, Russia (**Lewis**).

Achievements and future directions

The strategy of UoA4 during this census period has been to increase our staff base to complement and strengthen the existing themes of research within the Unit. This has enabled us to move from a position of non-submission in REF 2014 to submitting 10 staff with strong research profiles and two impact case studies. As capacity of Model 1 supervisors has increased, so has the number of PGRs within the Unit. As our community expands and develops, so do opportunities for interdisciplinary research and external collaboration. Our five-year objectives going forward seek to build on these achievements and further strengthen our profile externally through targeted application of research funding, continued KE and stakeholder engagement. Impactful research such as that detailed within the submitted impact case studies will provide a foundation on which to develop and build new opportunities for impactful research that will serve to benefit communities beyond academia.