

Institution: Queen Margaret University, Edinburgh
Unit of Assessment: UoA 4 Psychology, Psychiatry and Neuroscience
<p>1. Unit context and structure, research and impact strategy</p> <p style="text-align: center;">The structure of the submitted unit</p> <p>The composition of the submitted unit has changed markedly since the submission to REF2014. The submission to REF2014 Unit of Assessment 4 included six researchers, all based in or aligned with the subject area of Psychology in the School of Arts, Social Sciences, and Management in Queen Margaret University (QMU). This submission includes researchers drawn from three Divisions across QMU as follows:</p> <ul style="list-style-type: none"> • Psychology, Sociology, and Education (Chisholm, Darling, Jones, Knowles, Mansour, McVittie, Sagan, Uytman, Wilson) • Occupational Therapy and Arts Therapies (Elliot, Forsyth, Gorska, Maclver, Rutherford) • Nursing (Tyagi) <p>The cross-disciplinary nature of this unit reflects broader structural changes within QMU during the assessment period. Prior to this assessment period, research within QMU had been largely organised around subject areas and Divisions, with loosely organised University-wide research themes allowing for some interdisciplinary collaborations. In 2015, QMU restructured its research and impact activities around six new interdisciplinary research centres. One of these newly formed research centres is the Centre for Applied Social Sciences (CASS), of which McVittie is Director. CASS, brought together researchers from Psychology and researchers within other disciplines who conducted research on topics relating to social science. The activities of CASS are organised around four research clusters, as follows:</p> <ol style="list-style-type: none"> 1. Firefly, the international hub for multidisciplinary research which underpins the Model of Human Occupation. This work has an applied focus, producing psychologically-related research that can directly inform health policy and practice; 2. Memory Research Cluster, which conducts research into theoretical and applied aspects of human memory. This cluster takes up and extends research that in 2014 was submitted under a Psychology theme of <i>cognition</i>; 3. Public Sociology Cluster, which advances sociological knowledge through engagement between academic researchers and key publics involved in social justice issues; 4. Qualitative Social Studies Cluster, which conducts research that examines the individual and social meanings of experience across a broad and diverse range of activities in everyday life. This cluster takes up and extends research that in 2014 was submitted under a Psychology theme of <i>discourse</i>. <p>Members of clusters 1, 2, and 4, are included in this submission.</p> <p>As well as promoting cross-disciplinary research, the introduction of research centres marked an increasing emphasis on collaborations, networks, and partnerships with key research users, beneficiaries, and audiences, and on incorporating the generation of impact in all research activities. This dual emphasis on the conduct of high-quality research and the generation of research impact has since 2015 been a central focus of work by researchers in CASS. Since its formation, CASS has aimed to produce research that has real-world application in being relevant to people's lives locally, nationally, and internationally. The potential for impact is thus a key part of research conducted by the Centre and its members. CASS researchers work with individuals to promote health, well-being and social participation, and with practitioners to ensure that the services they deliver are informed by and reflect best practice. At the same time, they work with policy-makers to contribute to the development of policy that will enhance quality of service provision and will promote public participation and understanding of major social issues and challenges.</p>

Achievement of strategic aims for research and impact during the assessment period

In its REF2014 submission, the unit set out the following as its strategic aims and goals for research for the 2014 to 2021 assessment period:

- 1) to consolidate the themes of *discourse* and *cognition* as primary directions for research;
- 2) to increase the number of research-active staff from six to eight, with an attendant increase in funding applications, high-quality outputs, conference presentations, and research seminars;
- 3) to embed pathways to impact in all research produced within Psychology;
- 4) to maintain the (then) level of recruitment of research students;
- 5) to double the amount of external funding received (£83,576 between 2008 and 2014) in the 2014 to 2021 period.

It also set out the following impact goals for the assessment period:

- 1) to increase the number of press releases and summaries of research plans provided to key users and the public;
- 2) to develop a database and/or mailing list of interested parties and key contacts that will enable focused dissemination and discussion with relevant user groups and beneficiaries;
- 3) to facilitate more open-forum discussions of research findings with user groups and beneficiaries;
- 4) to ensure that new research projects developed within the Unit include, from the beginning, a pathway to impact statement of how the findings from proposed research will produce impact and the steps that will be taken to do so;
- 5) to require PhD candidates to demonstrate how their proposed projects will generate impact;
- 6) to require applicants for academic posts to demonstrate that their research either has generated impact, or potentially can generate impact, for non-academic users.

Although changes in the structure of the submitting unit, and in QMU's organisation of its research activities, preclude any direct comparison of activities in the periods prior to and following the establishing of research centres in 2015, the aims and goals set out in the 2014 submission have been largely taken forward and met through achievements of CASS. Specifically, in relation to research aim #1, the previous research focus on *discourse* and *cognition* is reflected in two of the four CASS research clusters (clusters 2 and 4); the number of REF-submittable staff has increased from six to 15 (as reflected in this submission) (aim #2); in line with CASS' focus on the generation of impact as a central element of research activities, pathways to impact are now routinely embedded in research produced within the Unit (aim #3); recruitment of research students has been increased, with 10 research doctoral degrees being awarded during the period of assessment (aim #4), and external funding received has increased from £83,576 in the 2008 to 2014 assessment period to c. £4,300,000 in the current assessment period.

With regard to impact, the focus within CASS on embedding impact in research activities, has led to impact aims #1 to #5 being treated as central elements of research conducted within the Centre. The extent to which impact aim #6 has been achieved is more difficult to evaluate: the focus on research centres as the vehicles for conducting research and generating impact has served to intensify research efforts but to separate these from other activities of academic divisions. CASS encourages Divisions to treat impact / potential impact as key elements of appointment to academic posts but the appointment of staff is within Divisional remit.

Evidence of achievement of previous goals relating to the generation of research impact is found in the two impact case studies being submitted. Both case studies derive from research conducted within the Unit that was designed to address issues of direct relevance to everyday life. Case study 1 (Reducing dietary intake of free sugars) stems from research that examined everyday dietary behaviour of individuals and that sought to produce an understanding of those behaviours where previous research findings had been inconclusive. Case Study 2 (Reducing waiting times for Autism diagnosis) also stems from research that sought to address a major everyday issue in the form of waiting times involved in obtaining a specific diagnosis and reduction of the costs of delay. In each case the impact generated from the findings has led to changes in policy and practice, consistent with the submitting Unit's approach to the conduct of research that

has everyday relevance and its focus on integrating research and impact in the research activities of members.

Future strategic aims and goals for research and impact, how these relate to the structure of the unit and how they will be taken forward

The unit will continue to progress to an open research environment, embedding practices of producing open access research outputs, open data research, and research integrity as key elements in all of its activities. In line with QMU's Easy IP (intellectual property) Policy, the unit will seek to maximise user engagement with its research. Future strategic aims and goals involve the continuation and further development of activities in the assessment period. In particular, activities will be focused on the following aims:

- 1) to increase the number of REF-submittable staff, with an attendant increase in funding applications, high-quality open access outputs, conference presentations, and research seminars;
- 2) to maintain the current level of recruitment of research students;
- 3) to maintain the current level of external funding (c. £620,000 per annum) in the next assessment period;
- 4) to maximise impact from all research conducted;
- 5) to increase further dissemination of research outcomes and public engagement through regular public meetings and events.

These aims will be taken forward by means of mechanisms and processes already in place to support research. Within CASS, these comprise the following:

CASS meetings: All members of CASS are invited to attend regular meetings to discuss research outputs, funding applications and successes, recruitment of research students, research seminars, and conference presentations. They also consider funding calls and other opportunities from external bodies, their relevance to CASS research, and how research activities within CASS can be most effectively supported.

Cluster meetings: Researchers within each cluster will meet monthly to discuss and conduct collaborative projects. Future discussions will include, as a priority, identification of funding possibilities to support such work. In doing so, they will consider funding calls and research priorities issued by major external funders that are relevant to the cluster and will develop and submit related funding proposals. Cluster meetings will also identify relevant topics of study for potential research students.

Mentoring: Junior members of staff and new members of staff appointed will be offered mentoring from more senior researchers in developing their research plans and careers and ensuring best fit with CASS and cluster research priorities.

Online resources: An online CASS site provides details of current funding calls, research resources, and opportunities for all members to discuss and share research plans and proposals.

Funding: CASS annually receives funding from QMU to support research and impact-generation activities. All members of CASS are invited to apply for funding to support and develop their activities, whether in conducting new research or maximising dissemination, engagement, and impact from completed projects. Priority in the allocation of available funding is given to applications that demonstrate clear fit with CASS' aims and goals and that will take these forward most effectively.

Aims and goals will also be taken forward through academic divisions by means of *Performance Enhancement Review (PER)*. Each member of staff with significant responsibility for research plans his / her research activities for the following year as part of the QMU PER process. This process ensures that each research-active member of staff has a workload that is suitably balanced to enable him / her to pursue research. PER is conducted by the Head of Division, following discussion with the Director of CASS as to the setting of individual research objectives within the scope of PER planning. The Head of Division has responsibility for staff developmental budgets and can support researchers at a local level and facilitate research activities such as conference attendance and travel to research meetings.

2. People

Staffing strategy and staff development within the submitted unit

This submission includes researchers from three academic Divisions within QMU. Each Division is responsible for the recruitment of its staff and appoints to vacancies at least in part on the basis of research achievements and future research potential. Each Head of Division is responsible for conducting the PER process with existing and newly appointed members of staff and for ensuring that research-active staff have a workload that is suitably balanced to enable them to conduct research. Heads of Division have responsibility for staff developmental budgets that allow them to support staff development as agreed in the course of discussions with individual members of staff.

All existing and newly appointed members of staff are encouraged to join one or more QMU research centres relevant to their research interests. Those who join CASS, at all stages of careers, have available to them a range of forms of support for development. These include opportunities to share ideas and receive advice / guidance from other members, in the course of CASS meetings, cluster meetings, online discussions, availability of informal mentoring, and financial support for developing their research plans and careers.

In addition to the support made available by the Centre itself, CASS also provides a locus for providing institution-wide support for the development of staff involved in research. CASS operates and delivers support to staff in line with QMU's commitments as a signatory to the 2019 Concordat to Support the Career Development of Researchers. Consistent with the principles in the Concordat, CASS provides a supportive and inclusive research culture that enables researchers to develop their full potential through professional and career development. Recent researcher development opportunities made available by CASS have included (a) training sessions on the use of Research Professional and Research Fingerprint in identifying funding opportunities, (b) a session delivered by Professor Ian Rivers, a member of the ESRC's Strategic Advisory network, on best practice in applying for ESRC funding, and (c) an open discussion session on developing and publishing research outputs. All staff in the unit thereby benefit from CASS' provision of support in ways that reflect best practice for the development of their research careers.

In July 2020, members of the submitting unit participated in the first pilot UK biennial Culture, Employment & Development for Academic Researchers Survey (CEDARS) to share their experiences of the research culture and the associated responsibilities of those who manage researchers. Members have also participated in a Wellcome Trust Café Culture discussion, allowing them to share in the development and enhancement of a research culture that fully reflects and recognizes their research contributions. Reflecting the activities of the submitting unit and other units within the University, QMU in 2020 received the 10 Year HR Excellence Award for the Concordat to Support the Career Development of Researchers.

Support mechanisms for, and evidence of the training and supervision of, PGR students

QMU has an annual university-wide competition for funded PhD places. Successful candidates receive an annual stipend of £15225 for three years, together with an allocated budget of £2000 to spend on research activities, including conference attendance, travel, dissemination activities, or building research networks. Available topics are widely advertised internally and externally. CASS annually advertises bursary topics falling within its research clusters. In each year during the assessment period, a CASS candidate has been successful in this competition. During the period of assessment, 26 research doctoral degrees have been awarded to students completing psychology-related study.

Research students undertaking Psychology-related research are supervised by at least two members of staff belonging to the cluster in which the research project sits. Composition of supervisory teams is designed to ensure that students receive supervision from a researcher who is familiar with the topic and a supervisor who has experience of previous PhD supervision to completion and who can oversee progress of the project. Research students meet with their Director of Studies monthly and with the supervisory team at least once every four months during

their period of study. Research students are enrolled as affiliate members of CASS to ensure that they have access to all forms of support provided by the Centre. Postgraduate research is further supported through dedicated research space, and access to shared facilities, by expert staff, and by means of on-campus and electronic resources that include remote access to the QMU central desktop (with databases, e-journals etc.). Psychology research students are allocated desk and storage space in an area immediately adjacent to full-time members of staff, allowing ready communication between students and supervisors and serving to embed students within a community of researchers. All these arrangements provide research students with the facilities, resources and expertise necessary to ensure that they are successful in pursuing their research projects. During the academic year, CASS research clusters run programmes of regular research seminars that all staff and postgraduate students are invited to attend. Many of these seminars are delivered by postgraduate students, allowing them to gain experience and to receive feedback and advice on their studies, while also providing other students insight into the PhD process and familiarity with the work of colleagues. Research students in their later years of study provide support and informal mentoring to those coming new to the unit.

QMU provides training and support for research students through a University-wide doctoral READ programme and a series of doctoral workshops. The READ programme is a 60 credit doctoral certificate in researcher development that supports the development and enhancement of research knowledge, skills and ability. A series of doctoral workshops is also held every year to support the development and progression of doctoral candidates, including sessions on advanced SPSS / statistics, and workshops that prepare students for the viva and for future career development as researchers. All doctoral students belong to the Doctoral Students' Association that provides regular opportunities for peer support and runs an annual conference at which all research students are invited to present their work in a friendly and supportive environment. Research students affiliated to CASS have in recent years taken up leading roles in the association, and have participated in and contributed to the organisation of the annual conference.

Postgraduate students in CASS also benefit from the environment and support made available through national networks. QMU is a Member institution of The Scottish Graduate School of Social Science (SGSSS), a unique collaboration between Universities in Scotland to make available outstanding research training to doctoral students in the social sciences. The aim of SGSSS is to improve both the quantity and quality of postgraduate research provision in the social sciences across Scotland. Students of Member Institutions have access to research expertise across Scotland, allowing them to take advantage of a variety of study in social sciences, as well as in subjects where social scientists are collaborating with colleagues from other disciplines such as medicine and the natural/physical sciences. SGSSS runs regular training sessions that are open to students from Member institutions, and an annual Summer School that includes sessions on interdisciplinary working; communication and networking; visual methods; policy research; ethnographic and participatory methods; social theory; collaborative research, and presenting research in innovative ways. Postgraduate students from the unit regularly attend these SGSSS training sessions and CASS provides support for them to do so.

How the submitting unit supports and promotes equality and diversity

QMU's mission statement demonstrates a commitment to social responsibility, inclusion and participation. QMU is committed to promoting the general duties set under the Equality Act 2010 of eliminating discrimination and advancing equality of opportunity and fostering good relations across protected characteristics. It has engaged in the Vitae "Every Researcher Counts" initiative and promotes good practice, for example through a Single Equality Scheme which embeds equality in all aspects of its research strategy. All research activities of CASS and of the submitting unit are conducted in accordance with this strategy. Funding, training, and other opportunities offered for the submitting unit are open to all members. Members of the submitting unit have been funded to attend events organized by Soapbox Science, a platform that promotes women in science and their work, and events run by bodies that include EntreprenHER and AcceleratHER to promote female entrepreneurship. Participation in all such activities is designed to embed equality and diversity in the research culture of the unit.

Research, dissemination of findings, and impact-related activities conducted by members of the submitting unit similarly reflect and implement these principles, thereby ensuring that equality and diversity are integrated and promoted in the full range of activities of the submitting unit. The submitting unit's culture of supporting and promoting equality and diversity is reflected in many of the outputs included in this submission, which report research conducted with diverse and underrepresented groups. It is further evidenced by the extensive engagement of members of the unit with diverse communities and publics throughout the period of assessment, as detailed in section 4 below. This culture also reflects and is reflected in QMU's Code of Practice that was developed for REF2021. The outputs included in this submission were selected and attributed to individuals in accordance with the procedures and principles set out in Part 4 of that Code of Practice, and an equality impact assessment was conducted to ensure that the final selection and attribution of outputs was fair and transparent and did not discriminate inadvertently against any protected group.

3. Income, infrastructure and facilities

Income

During the assessment period, the submitting unit has been highly successful in attracting external funding to conduct its research activities. Much of its work has been supported by funding from UK central government bodies / local authorities, health and hospital authorities, with funding from these sources amounting to £4,044,750. This success in attracting funding from these sources highlights the importance of the work conducted by members of the submitting unit for these bodies, and the relevance and impact of that research for policy-makers, health providers, and for the promotion of individual health. The submitting unit has also received funding from UK-based charities, other UK sources, and other sources of c. £285,000, demonstrating the range of sources of income made available to it during this time.

Infrastructure and facilities

Members of the submitting unit have the following dedicated facilities available to them for conducting Psychology-related research:

On campus -

(i) 2 fully equipped laboratories with 24 high specification PC computers (10 purchased in the last year) in total (regularly updated), each with an extensive range of software (E Prime Professional, PsychoPy, SPSS, NVIVO) for conducting experiments and analysis of quantitative and qualitative data. There are also EPRIME Serial response boxes and EPRIME Custom Expansion Kit to enable full use of the programme in running experiments. Additional software includes Adobe Fireworks, MediaLab and DirectRT, Snagit and Camtasia. We have 2 Acknowledge licenses for our Biopac equipment on a dedicated PC and laptop respectively. Hardware includes 12 laptop computers (4 purchased in the last year) (with E-Prime Professional, PsychoPy, SPSS, NVIVO), 1 Nikon 3300d dslr camera with 18-55mm lens, 1 compact digital camera, 2 Canon video cameras, 12 digital recorders, a range of microphones, and 10 sets of headphones. One lab has been newly equipped with a Biopac MP160 system with EDA100C and ECG100C modules and accompanying accessories (electrodes, leads). There is seating room for 24 people across the 2 labs;

(ii) The use of these resources is supported by a dedicated 1 FTE Psychology technician. As well as these resources, Psychology research also has use of shared resources within QMU that include:

(iii) Motion Analysis Laboratory, Human performance laboratory, General purpose laboratory, Audio/video recording studio, 2 x sound and video edit suites, Speech Science laboratories, Speech and language resource room, Audiology Resource Rooms;

(iv) Learning Resource Centre, equipped with an extensive stock of Psychology texts and journals, ejournals, and access to numerous electronic Psychology and interdisciplinary databases;

(v) eResearch, the QMU electronic research depository;

(vi) All staff have access to researchresearch.com and Research Professional, providing the most comprehensive details of current funding opportunities for research in the UK and internationally.

The use of all these resources is supported by expert staff, including IT support, a Research Support Librarian, an audio-visual technician and a photographic technician.

Off campus –

A newly developed Horizon desktop provides remote access to the QMU central desktop, all QMU research support units, and all electronic resources, providing immediate access for researchers working off-campus. All staff have access to a University provided Microsoft 365 account, which provides continuous access to the latest versions of the Microsoft Software Suite as well as 1TB of OneDrive cloud storage.

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

Research collaborations, networks, and partnerships

Members of the submitted unit have during the period of assessment collaborated widely with colleagues based in other academic institutions, as set out below.

Collaborations, networks, and partnerships with academic colleagues

Chisholm: Research outputs (Danube University Krems, McMaster University (Ontario), Napier University, Ryerson University (Ontario), University of Portsmouth).

Darling: Research outputs (Australian National University; Polytechnic University of Valencia; The University of Edinburgh; University of Aberdeen; University of Adelaide; University of Leeds; University of London; University of Sydney; University of West of Scotland; University of Westminster); PhD Supervision (University of Cardiff).

Elliot: Research outputs (AT Still University (Mesa, AZ); Humboldt University Berlin; University College SYD, Esbjerg; University of Essex).

Forsyth, Gorska, Maciver, & Rutherford: Research outputs and funding (Amsterdam University of Applied Sciences; Boston University (Boston, MA); City University, London; Clinical Trial Service Unit, Oxford; Edith Cowan University (Joondalup, Australia); Institute of Psychiatry, London; King's College London; London School of Economics and Political Science; Lund University (Sweden); Northumbria University; Saitama Prefectural University (Saitama, Japan); The University of Edinburgh; University College London; University of Cambridge; University of East Anglia; University of Florida; University of Granada (Spain); University of Manchester; University of Oxford; University of Ruse (Bulgaria); University of Stavanger & Oslo Metropolitan University (Oslo, Norway); University Stellenbosch (South Africa); University of Toronto). The extent and strength of these collaborations is reflected in and marked by the appointment of senior researchers in these institutions as honorary members of CASS.

Jones: Research outputs (Cardiff University; Keele University; Oxford Brookes University; Tallaght University Hospital, Dublin; University of Exeter; University of London; University of Strathclyde; University of Western Australia; University of Winchester).

Knowles: Research outputs (University of Bath; University of Stirling).

Mansour: Research outputs (Queen's University, Ontario; Swinburne University of Technology, Victoria; University of Ontario Institute of Technology; University of Winnipeg)

McVittie: Research outputs (Coventry University; Monash University; Queensland University of Technology; The University of Edinburgh; The University of Gothenburg; The University of Limerick; The University of New South Wales; The University of Newcastle (Callaghan, NSW); Trinity College Dublin; University of Queensland; University of Sydney; University of West of Scotland); PhD supervision (The University of Edinburgh).

Sagan: Research outputs (Bishop Grosseteste University; University of Bedfordshire)

Tyagi: Research outputs (Ryerson University, Ontario; University of Georgia (Athens, GA); University of Plymouth)

Uytman: Research outputs (University of Aberdeen; University of Leeds, University of Strathclyde)

Wilson: Research outputs (Lancaster University; University of London; University of Sunderland)

Relationships with key research users, beneficiaries and audiences

As well as involving collaborations with academic partners, much of the research conducted by members of the submitted unit has been conducted through extensive and integrated collaborations with key research users, beneficiaries or audiences. QMU is committed to the Concordat for Engaging the Public with Research and was an early signatory to the National Co-ordinating Centre for Public Engagement (NCCPE) Manifesto for Public Engagement. QMU's commitment to engagement with a wide range of audiences, and CASS' focus on producing research with real-world application and relevance to people's everyday lives are reflected in relationships and research collaborations with external organisations that include *health and social care services, industry, government bodies*, and others. Specific instances include the following:

Elliot has collaborated with Street Soccer Scotland in researching how football can support people on their journey to security and happiness. The extent of this collaboration is reflected in a formal memorandum of understanding between Street Soccer Scotland and QMU for the continuation of this research.

Forsyth, Gorska, Maciver, & Rutherford have enjoyed extensive collaboration and integration with health and social care services (NHS, social care, education) as well as with government bodies. The children's inclusion and participation research programme has very longstanding relationships with the Royal Hospital for Sick Children, NHS Lothian, and City of Edinburgh Council Additional Support for Learning services, as well as ongoing productive relationships with other education authorities across Scotland. Work within schools has focused on developing a cross-sector research programme, and has made significant contributions to policy and practice of Health and Educational staff acting to improve the practices of professionals working to improve the social and educational participation of children with special educational needs and disabilities. Materials derived from their research have been fully adopted within schools and across education authorities. Relatedly, they have a longstanding relationship with the Scottish government, particularly the Scottish Government Mental Health Directorate and Education Directorate, and their associated staff and ministers.

Jones has collaborated extensively with partners in the toy industry (#toylikeme, Lottie dolls, Museumand, Zuree, Buddy Bear Friends), conducting research that can inform the design and production of dolls and toys to promote identity and inclusivity for members of underrepresented and marginalized groups. These extensive collaborations have led to the production of dolls and toys that promote the representation and inclusion of children from groups that are traditionally underrepresented and marginalized and that will thereby enhance health and well-being of children in those groups.

Mansour is a member of the Scottish Institute for Policing Research (SIPR) and has collaborated extensively with Police Scotland in conducting research into psychological factors involved in lineup procedures and in devising best practice for promoting confidence and effectiveness of eyewitness identification.

McVittie has collaborated with the Scottish Refugee Council in researching experiences of asylum-seekers and refugees based in Scotland, and the understandings of organizations that support these groups and the views of local communities towards them. He has also collaborated with CrossReach (Counselling Service) in devising and applying methods for evaluating the delivery of group psychotherapy services.

Sagan has collaborated with a number of mental health self-help and campaigning groups including PD in the Bin and Lothian Bipolar Group. She collaborates with Kilifi University, Kenya on the Maranhi Secondary School project for street kids and The Life Foundation's mental health projects in Slatina, Romania. Sagan's co-edited book *the Recovery Letters* was nominated for World Book Night and distributed in care homes, youth centres, colleges, prisons, mental health groups and other settings, generating a number of self-help / reading groups and raising awareness of the therapeutic impact of reading and writing.

Wider activities and contributions to the research base, economy and society (including collaboration or integration with external organizations, and engagement with diverse communities and publics)

The submitted unit's approach to embedding engagement with key research users and publics in its research, and to the generation of research impact, is evidenced by a range of activities and contributions during the period of assessment. These include the following:

Darling has delivered engagement presentations as part of the Cabaret of Dangerous Ideas in Glasgow and Edinburgh (as part of the Edinburgh Fringe) and also separately from this as part of 'Bright Club'.

Forsyth, Gorska, Maciver, & Rutherford have engaged throughout the period of assessment with external organizations and diverse communities and publics. Their activities include

- work with external partners, such as the THRIVE Initiative, Edinburgh, Health and Social Care Partnership, Edinburgh, NHS Lothian, and third sector organisations, service user and carer collective advocacy groups, to promote well-being among those facing mental health challenges. This work has led to service design for people with complex mental health needs.
- development of and participation in the Wayfinder research initiative, with partners across the strategic Mental Health and Wellbeing Lead, Edinburgh Health and Social Care Partnership, NHS Lothian, Third Sector Providers, service user and carer collective advocacy. This collaboration has supported commissioning and delivery of support and accommodation services (supported housing and visiting support) for people with mental health needs.
- participation in longstanding clinical relationships with the WORKS clinical service for vocational rehabilitation, NHS Lothian leading to initiatives designed to support people with complex mental health problems to attain and maintain employment.
- collaboration with the Care of the Elderly medical team, at the Royal Infirmary Edinburgh and the TrakCare team, at NHS Lothian, and with several NHS trusts in England, including North East London Foundation NHS Trust, London and South West London and St George's Mental Health NHS Trust and Gloucestershire NHS trust, which has informed practice development and research capacity development of professionals.

Jones' collaborations with organizations in the toy industry have been reflected and taken up in a range of activities designed to promote social inclusion and participation of marginalized groups. These have included

- work with #toylkeme, a not-for-profit organisation, to promote representation of disability in the toy industry, to boost self-esteem of children with disabilities, and to grow open minds. Jones ran a stall at the Edinburgh Science Festival in April 2019, using #toylkeme resources, and on 7 December 2016 appeared with Rebecca Atkinson of #toylkeme on BBC 2 television's 'See Hear' to discuss the objectives of this collaboration.
- work with Lottie dolls, a company that manufactures figure dolls that demonstrate to all children that they can achieve anything they set out to accomplish. This collaboration has led to leaflets that accompany the dolls' packaging, e.g. Mia (released June 2017), Hayden (released August 2018).
- collaboration with Zuree dolls, a brand that manufactures figure dolls that are designed to promote diversity and show all girls they are truly beautiful regardless of their ethnicity. Jones presented in a public symposium with Zuree dolls on Black Dolls: The Power of Representation event on 6 October 2018, an event held in partnership with The National Trust Museum of Childhood, Sudbury Hall and The National Lottery Collecting Cultures fund. This publicly attended event included talks by guest speakers and a panel discussion and Q&A about the importance of Black dolls, toys, games, characters in children's books and identity in childhood.
- an evaluation for Buddy Bear Friends, a social enterprise that delivers early interventions for friendships in schools.
- collaboration with the Anti-Bullying Alliance, leading to a seminar series in 2017 that consolidated and developed further links between academics, policy-makers, anti-bullying charities, and education professionals with regards to the issue of bullying in schools.

These seminars in turn led to an agenda for research and related theory, practice, and policy for the medium-term future in the UK and to the establishment of the UK-wide School Bullying Research Network.

Mansour's membership of the Scottish Institute for Policing Research (SIPR) and collaboration with Police Scotland has led to

- dissemination to Police Scotland of findings from her policing-relevant research
- collaboration in the production of research materials relevant to eyewitness identification procedures derived from the VIPER (Video Identification Parades Electronic Recording) system
- a planned networking SIPR event to be held by QMU
- a planned conference to be held with Police Scotland at QMU
- recruitment of a PhD student to pursue research into missing persons

Wilson has delivered talks at the Edinburgh International Science Festival and the Midlothian Science Festival.

Contribution to the sustainability of the discipline

Much of the research conducted by members of the submitted Unit has involved collaborations with researchers from other disciplines. Specific examples of interdisciplinary research include the following:

Forsyth, Gorska, Maciver, & Rutherford have worked with researchers in the fields of clinical sciences, medicine, occupational therapy, psychiatry, public health, and social care in conducting the research and activities described above.

McVittie has worked with researchers in the fields of social work and art therapy in conducting research into the experiences of asylum-seekers and refugees and the delivery of group psychotherapy respectively.

Sagan works collaboratively with researchers who are experts by experience, i.e. psychiatric service users with long histories of mental ill health. Her work is based on mentoring survivors of the psychiatric system as they develop their autobiographic academic work. Two of these, Drew Walker (Glasgow University) and Alice Evans (Lancaster University) are now in the final stages of practice based PhDs and are also contributors in a forthcoming (2021) anthology edited by *Sagan*. *Tyagi* has worked with researchers in the fields of computational neuroscience, psychology, roboticists, arts and humanities. Currently he is a co-applicant and a collaborator of the ongoing Scotland Chief Scientist Office's Rapid Research in Covid-19 (RARC-19) project, as a member of a team including researchers from the fields of psychology, physiotherapy, occupational therapy, and nursing.

Indicators of wider influence

Indicators of wider influence include the following:

Journal editorships

Maciver is on the Editorial Board of the British Journal of Occupational Therapy

Mansour is on the Editorial Board of Forensic and Legal Psychology.

McVittie is on the Editorial Board of the British Journal of Social Psychology, and Global Journal of Psychology Research: New Trends and Issues. He has acted as Guest Editor of British Journal of Social Psychology, and Guest Editor of Journal of Community and Applied Social Psychology.

Tyagi is on the editorial board of Journal of Creative Thinking.

Fellowships

Darling is a Fellow of the Psychonomic Society.

McVittie in 2019 was awarded Fellowship of the American Psychological Association (APA) and Fellowship of APA Division 5 (Quantitative and Qualitative Methods) in recognition of his unusual and outstanding contribution in the field of psychology.

Tyagi has been a fellow of the British Neuroscience Association (BNA) and the Federation of European Neuroscience Societies (FENS) since 2019 for his work in the field of Cognitive Neuroscience.

Prizes

Elliot in 2014 was awarded the Elizabeth June Yerxa Award from the Division of Occupational Science and Occupational Therapy at the University of Southern California, Los Angeles, California, USA. This prize marks the contribution of one of the visionaries of occupational science and is awarded annual to an individual with excellent potential to make a valued contribution to the profession.

Membership of national and international committees

McVittie is

- member of the International Committee, APA Division 5 Society for Qualitative Inquiry in Psychology
- member of the recently constituted APA Member Panel, a Panel set up to advise the APA on preparing for the future and on new initiatives to be pursued.
- member of Scientific Committee, International Psychological Applications Conference and Trends
- member of International Scientific Committee, World Conference on Psychology, Counselling and Guidance
- member of Executive Committee, International Society of Critical Health Psychology.
- external research consultant/advisor to five international universities (National and Kapodistrian University of Athens, University of the Aegean, University of Crete, University of the Peloponnese, University of Western Macedonia) in recognition of which he has been appointed to the external registry of each institution.

Rutherford is

- National Advisor in Autism for the Royal College of Speech and Language Therapists
- Consultant member of the SIGN 145 guideline group
- Invited member of the International Association of Logopaedics (IALP) autism committee (2017-19)
- Invited member of the Scottish Government round table on autism in schools

Invited keynotes and presentations

Members have given the following invited keynotes and presentations:

Darling:

- Invited presentation at 'The Mind's Spatialization in Humans and Non-humans' workshop in Nice (2019)
- Invited seminars: Heriot University, University of Stirling
- Invited article in special issue of Annals of the New York Academy of Sciences on Spatialization

Elliot:

- invited presentation to graduate seminars at Karolinska University (2015); Brunel University (2016); Scottish Social Sciences Graduate Summer Series (2018, 2019, 2020); forum discussion at 2019 Society for Study of Occupation: USA conference in Arizona.

Forsyth:

- invited presentations to College of Occupational Therapists Specialist Section: Housing (2015); Scotland National Autism Implementation conference (2019); World Federation of Occupational Therapists (2014)

Jones:

- invited keynote to Scandinavian Social Psychology Association annual conference (2014);
- invited presentation to Bias-Based Prejudice International Conference, Paisley, UK

Maciver:

- invited presentations to Canadian Association of Occupational Therapists (2017); Scotland National Autism Implementation conference (2019); World Federation of Occupational Therapists (2014)

Mansour:

- invited presentations to the School of Applied Social Sciences, Edinburgh Napier University; Cognition in Complex Environments Group, Stirling University; the Applied Face Recognition Workshop, Stirling University; Centre for Cognitive and Neural Systems, University of Edinburgh; South East Eyewitness Network, Greenwich University.

McVittie:

- invited presentations to Department of Psychology, Coventry University, Department of Psychology, Heriot-Watt University, Department of Psychology, The University of Edinburgh.

Rutherford:

- invited keynote to Scotland National Autism Implementation conference (2019);
- invited presentations to Asia Pacific Autism Conference (2019); Autism in Initial Teacher Education Conference (2020); Educational Institute of Scotland Conference (2019); Scottish Autism Strategy conferences (2015, 2016, 2017); Scottish Government Autism Conference (2018)

Sagan

- invited presentation Alone Together Again: A Second International Pan-disciplinary Symposium on Solitude in Community, Szczecin, Poland (2020)
- Invited presentation : Film Medicine : University of Edinburgh (2020)

Tyagi

- invited presentation at the annual meeting of the Internal community of practice (ICoP), London (2019)
- invited presentation at the 2nd Marconi Institute of creativity conference, University of Bologna, Italy (2016)
- Invited presentation at the CogNovo Colloquium, University of Plymouth (2015)

Wilson:

- invited presentation to Department of Psychology, University of Sunderland.

Refereeing academic publications or research proposals*Darling* has reviewed

- grant applications for the Economic and Social Research Council
- manuscripts for Annals of the New York Academy of Sciences, Frontiers in Psychology, Frontiers in Human Neuroscience, Memory and Cognition, Memory, Cognitive Development, Neuropsychology Review, Journal of Experimental Psychology - General

Forsyth has reviewed

- manuscripts for the British Journal of Occupational Therapy

Gorska has reviewed

- manuscripts for Aging & Mental Health, Aging and Society, British Journal of Occupational Therapy, International Psychogeriatrics.
- book for Routledge

Maciver has reviewed

- manuscripts for British Journal of Occupational Therapy, Child Care Health and Development, Developmental Medicine and Child Neurology.

Mansour has reviewed

- grant applications for the Economic and Social Research Council, National Science Foundation (US); reviewed manuscripts for American Psychologist; Applied Cognitive Psychology; Canadian Journal of Experimental Psychology; Journal of Cognitive

Psychology; Journal of Experimental Psychology: Applied; Law and Human Behaviour; Psychology, Crime, and Law; Psychology, Public Policy, and the Law

- conference submissions for the American Psychology-Law Society (AP-LS).

McVittie has reviewed

- grant applications for the Medical Research Council
- manuscripts for British Journal of Health Psychology, British Journal of Social Psychology, Discourse & Society, European Journal of Social Psychology, Journal of Community and Applied Social Psychology, Journal of Language and Social Psychology, Psychology and Health, Philosophical Psychology, Qualitative Health Research, Qualitative Psychology, Social and Personality Psychology Compass
- book proposals for the American Psychological Association, McGraw-Hill, Pearson Education, Polity Press, Sage Publications, Wiley-Blackwell.

Rutherford has reviewed

- manuscripts for BMJ Open Quality, Developmental Medicine and Child Neurology, Research in Autism Spectrum Disorders.

Tyagi has reviewed

- manuscripts for the Journal of Creative Behaviour

Wilson has reviewed

- grant applications for the Economic and Social Research Council
- manuscripts for BMC Psychology, Journal of European Psychology Students, Memory and Cognition
- book for Oxford University Press.

Co-operation and collaborative arrangements for PGR training

Members of the submitted unit contribute to training sessions organised and run by the SGSSS for the training of postgraduate students across all Scottish Universities. In 2018, *McVittie* delivered a workshop on micro approaches to discourse analysis, and in 2020 *Jones* delivered a workshop on social justice in PhD research, both as part of the SGSSS 'Spring into Methods' series.

Developing best practice in undertaking research that is reproducible

In taking forward QMU's commitment to the Concordat for Research Integrity, all members of the submitting Unit are encouraged and facilitated to act in accordance with the Concordat and to embed the principles of the Concordat in their research. Members are advised and encouraged to participate in the researcher training sessions provided by the UK Office for Research Integrity.

Members of the submitting Unit also conduct their work in accordance with the Concordat on Open Data Research, where possible making their research data available for use by others. *Mansour* and *Wilson* routinely deposit research data and materials on the Open Science Framework site, a platform that is designed to promote and enable collaboration among researchers. Other members of the submitting Unit deposit data sets in the publicly accessible QMU data repository, eData.

Forsyth, *Gorska*, *Maciver*, & *Rutherford* have permissions/agreements in place to utilise the following datasets in conducting collaborative work with other researchers:

- Clinical outcomes data from NHS Lothian Vocational Rehabilitation services.
- Clinical data from NHS TrakCare, NHS Lothian, with access to data on older people's demographics and outcomes.
- Data from the UK Millennium Cohort Study (>19,000 participants, UK data Service, Office for National Statistics and Centre for Longitudinal Studies (CLS) at the Institute of Education, University of London and NatCen).
- Data from the Scottish national pupils census (includes every school child in Scotland, ScotXed service, ScotXed Unit is part of Education Analytical Services Division within the Learning and Justice Directorate of the Scottish Government).

- (1) The Scottish Morbidity Record – Scottish Mental Health and Inpatient Day Case Section (SMR04) and (2) the Scottish Government Social Care Survey (SGSCS) data. These are two national datasets linked for first time in the Scottish Safe Haven, a Scottish Network that provides researchers across Scotland with access to anonymised data sets for purposes of data searching and collaborative research.

They have also developed a web-site with QMU research derived materials made available to other researchers - <https://www.thirdspace.scot/circle/education-resources/>

Tyagi has developed and curates a website making resources with QMU research available in open source format. This includes questionnaires, performance indices, and an e-book. Website - <https://www.cpcpr.org/resources> & <https://www.cpcpr.org/critical-creativity>

The collaborations and activities outlined above all demonstrate the contributions of members of the submitting unit to the research base, economy and society.