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<b>Institution:</b> University of Kent
<b>Unit of Assessment:</b> A4: Psychology, Psychiatry and Neuroscience
<b>a. Overview</b>

The School of Psychology at Kent has a strong and growing international profile for its research, which is conducted across three groups: **Social Psychology, Cognition and Neuroscience** and **Forensic Psychology** (see table below). The Forensic group was established after RAE2008 with major strategic investment in staffing and infrastructure. We have also strengthened our research in Cognition and Neuroscience whilst retaining our excellent reputation and productivity in Social Psychology, which makes us distinct from other Schools of Psychology in the UK.

<b>Social Psychology</b>	<b>Cognition and Neuroscience</b>	<b>Forensic Psychology</b>
Abrams, Brown, Calogero, Cameron, Cichocka, Douglas, Giner-Sorolla, Heflick, Hopthrow, Kerr, Randsley de Moura, Stoeber, Sutton, Swift, Uskul, Viki, Weick	Abbot-Smith, Bergström, Bindemann, Brooks, Ferguson, Johnston, Kelly, Nurmsoo, Sharma, Wilkinson, Williams	Alleyne, Gannon, Ó Ciardha, Pina, Vasquez, Wood

Our continuing growth and development has led to the submission of 34 researchers to REF2014, up 10% from RAE2008 and more than double the number submitted in RAE2001. Our annual research income has increased by 34% since RAE2008, including a 10% increase in income from Research Councils, 32% from UK-based charities and a fivefold increase from UK industry, commerce and public corporations (see REF3a). Our researchers play an increasingly important leadership role in the discipline, through national and international bodies (e.g., President of the Society for the Psychological Study of Social Issues; SPSSI); grant committees (e.g., ESRC) and esteemed international journals (four Chief Editorships, fourteen Associate Editorships); publishing extensively in flagship journals; and authoring and editing books (13 since 2008). These achievements have been underpinned by strategic planning and increased investment in our research environment, people, infrastructure and facilities.

**b. Research Strategy**

**b. i) Research strategy 2008-2013**

Our strategy since RAE2008 has been to increase our capacity to conduct world-leading psychological research, building on and beyond our traditional strength in Social Psychology. We have invested significantly in staffing and infrastructure, as well as in measures to increase the impact of our research in response to opportunities provided by the impact agenda of RCUK, REF and HEFCE. This strategy has had considerable success. For example, following our investment in four new faculty posts in Forensic Psychology, this new group contributes three of our four impact cases (REF3b) and works extensively with national and international partners in police forces, prisons, Government, charities and mental health organisations. It has won large external grants to develop the first standardised, theory-based treatment of firesetting (£513k from the ESRC) and to examine the effects of mandatory polygraph testing for sexual offenders (£324k from the Ministry of Justice; MOJ).

Another success has been our extensive Quality-Related (QR) investment in research equipment and infrastructure to support experimental research in Social Psychology and Cognition and Neuroscience (e.g., 12 new specialised laboratories, and brain imaging, stimulation, virtual reality and eye-tracking equipment – see section d). This has also facilitated staff recruitment for the Cognition and Neuroscience group (eight submitted in 2008; 11 in 2014). Thanks to these investments, this group has won significant funding for its work on theory of mind (e.g., a Leverhulme Trust award of £137k) and vestibular stimulation (e.g., a Medical Research Council award of £186k), the latter of which is informing clinical treatment and leading to a commercial development in partnership with a US company (REF3b).

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We have also continued to build on the historical strength of Social Psychology by recruiting and promoting staff. We have made targeted investments (e.g., a fund for recruitment of paid participants via the Internet), and have supported the group's many external activities with careful workload modelling. The group now has four full Professors, three Readers, and five Senior Lecturers. The group has an outstanding profile of publication and leadership in the field (as detailed in b. ii).

As part of our research strategy we have also significantly increased funding for PhD studentships (section c. ii), facilitating the work of all of our research groups. Similarly, research by all groups has been boosted by investments in developmental psychology, including our new Child Development Unit – a purpose-built facility for research with children (see section d). These investments have facilitated several prestigious papers (14 outputs in REF2 appear in *Child Development*, *Developmental Psychology*, and *Developmental Science*).

**b. ii) Research groups and collaboration**

Each group has professorial leadership, a fortnightly research seminar series and offers least one unique MSc course, providing recognised +1 training for our PhD students and a pool of high quality graduates whom we regularly recruit into PhD studentships. The groups are each associated with a thematic research centre funded by the University: respectively, the Centres for the Study of Group Processes (GSGP), Cognitive Neuroscience and Cognitive Systems (CCNCS) and Research and Education in Forensic Psychology (CORE-FP).

**Social Psychology group**

A key objective since RAE2008 has been to further strengthen this highly regarded group, which uses experimental and other quantitative methods to investigate the role of groups, cultures, emotions, cognition and communication processes in social problems. These problems include racism, sexism, ageism and other forms of prejudice and inequality, resource distribution (e.g., in social dilemmas), social cohesion, trust and social capital in society. The group's research has been funded by the European Commission (FP7), Economic and Social Research Council (ESRC), British Academy (BA), Higher Education Academy (HEA), Department for Business, Innovation and Skills (BIS), Department for Work and Pensions (DWP), Age UK, the Equality and Human Rights Commission (EHRC), Kent County Council (KCC), World Education Development Group (WEDG), Rights and Equality Sandwell, European Social Cognition Network (ESCON), Defence Science and Technology Laboratory (DSTL), and a Stanford University Fellowship. This group has:

- Pioneered theory and research on prejudice and inequality in contexts such as ageing, sexism and racism (e.g., outputs as numbered in REF2: Kerr3, Swift1, Viki3)
- Shown how the objectification of women leads to important real-world consequences (e.g., cosmetic surgery, voting behaviour) (Calogero2-4, Heflick1,3; Pina1,2)
- Generated leading international theoretical frameworks of perfectionism (Stoeber1-4), moral emotions (Sorolla1-3) and prejudice and group behaviour in childhood (Abrams1-4)
- Led new theory and experimental research on the social-psychological causes and consequences of conspiracy theories (Douglas1,3,4)
- Developed interventions that increase co-operation in social dilemmas (Hopthrow1,2), boys' educational performance (Sutton4) and physical strength in old age (Swift1).

Highlights of achievement since RAE2008 include: Abrams' BPS President's Award for Distinguished Contributions to Psychological Knowledge, and his Fellowship of the British Academy and Presidency of SPSSI (APA Division 9, first non-USA researcher to hold this post in its 77 year history); Cichočka's Robert Zajonc Award for outstanding early-career research; several researchers' fellowships and leadership positions (section e); three Editorships-in Chief and thirteen Associate Editorships of major international journals (section e); a monograph (Giner-Sorolla), an APA book on self-objectification (Calogero), and two other books (Sutton & Douglas); and papers in *Psychological Bulletin*, *Psychological Science* (x3), *Nebraska Symposium on Motivation* (x2), *Proceedings of the National Academy of Sciences*, *Child Development* (x4), and *Journal of Personality and Social Psychology (JPSP)* (x11).

**Cognition and Neuroscience group**

Expanding and diversifying the Cognition and Neuroscience group has been an important objective since 2008. The unit is now firmly established with a broad range of interests and expertise,

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including visual cognition, eyewitness identification, attention, theory of mind, memory and child language development using neurostimulation, neuropsychology, functional neuroimaging (event-related potential, ERP / electroencephalography, EEG), eye tracking and behavioural measures. Our research has been funded by the ESRC, Medical Research Council (MRC), Arts and Humanities Research Council (AHRC), Leverhulme Trust, BA, HEA, the Nuffield Foundation, NHS and the Experimental Psychology Society (EPS). The group has:

- Developed novel therapies to overcome the most troubling and refractory neurological disorders such as permanent vegetative state, migraine and stroke (e.g., Wilkinson's MRC-funded work, also in partnership with Scion Neurostim, detailed in REF3b)
- Uncovered major sources of individual variability in face recognition and eye-witness testimony (Bindemann<sup>2</sup>; Johnston<sup>2</sup>; Kelly<sup>1,3</sup>)
- Devised an attentional paradigm to improve detection of latent addictive tendencies to smoking and drinking (Sharma<sup>1,2</sup>)
- Discovered how eye movements shape the course of social interactions (e.g., Bindemann<sup>1</sup>, Ferguson<sup>4</sup>, Kelly<sup>4</sup>; Nurmsoo<sup>3</sup>)
- Uncovered the role of inner speech in autism (Williams<sup>1-4</sup>)
- Developed brain imaging techniques to discover the temporal dynamics of recollection, forgetting (Bergström<sup>1-3</sup>) and gestalt perception of figure and ground (Brooks<sup>1</sup>).

Highlights of achievements since RAE2008 include: publications in the *Journal of Cognitive Neuroscience*, *Neuroimage*, *Psychological Science*, *Developmental Science* (x5) and *Psychological Bulletin*; externally funded (private, NHS, MRC) work to develop neuropsychologically informed interventions for autism, neglect and migraine (Wilkinson); the membership of staff in the EPS (Abbot-Smith, Bergström, Bindemann, Ferguson, Sharma, Wilkinson, Williams) and the invitation of Ferguson to serve on the Steering Committee of the EPS.

**Forensic Psychology group**

Since 2008 this new research group has been steadily building grant income, impact and publication success. The group studies the mechanisms underpinning offending behaviour, key psychological features associated with offender populations, factors associated with effective offender rehabilitation and supervision and successful offender reintegration, using a range of established psychological methods. Our research has been funded by the ESRC, BA, HM Prison Service, MOJ and Kent Probation Service. The group has:

- Clarified factors associated with gang formation and activity (Alleyne<sup>1</sup>; Vasquez<sup>4</sup>; Wood<sup>2-4</sup>)
- Developed innovative theories to explain offending behaviour such as firesetting and sexual offending among women (Gannon<sup>2-4</sup>)
- Undertaken the first controlled evaluation of mandatory polygraph testing for community supervised sexual offenders (MOJ funded project)
- Highlighted the potential of cognitive implicit measures for practice and research in offender populations (Gannon<sup>3</sup>; Ó Ciardha<sup>1</sup>)
- Uncovered the social-cognitive mechanisms that lead to displaced aggression (Vasquez<sup>1-3</sup>)
- Produced key empirically-informed guidance on best clinical practice in the assessment and treatment of offending populations.

Establishing the Forensic Psychology group was a new strategic aim following RAE2008. Its highlights include: grants from the ESRC to examine firesetting behaviour and female sexual offending (Gannon) and from the MOJ to examine the use of polygraphs in interviews with sexual offenders (Gannon, Pina, Vasquez, Wood); the publication of six authored and edited books (Gannon, Wood); reviews to inform clinical and forensic practice pertaining to gang behaviour, sexual offending and firesetting; five guest edited special issues; editorships (section e); hosting the BPS Forensic Psychology conference and hosting the international Eurogang conference.

**Collaborations**

Members of each group share research interests and collaborate with other groups. For example, Developmental Psychology intersects with the research of members of all groups. Several staff members from the other groups are affiliated with the Forensic Psychology group and produce research of forensic relevance (e.g., Kelly, Sutton; Johnston and Bindemann have also guest-edited a special issue of *Applied Cognitive Psychology* on forensic face matching). Members of the Forensic Psychology group publish in leading social psychology outlets (e.g., Vasquez<sup>1,2</sup>) and

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collaborations between cognitive neuropsychologists and social psychologists have brought about publications (e.g., Hopthrow's *Consciousness & Cognition* paper, also Wilkinson<sup>3</sup>) and research grants (e.g., Wilkinson and colleagues' ESRC grant on social power, also Hopthrow's Leverhulme grant on mindfulness). Collaboration is facilitated by a friendly and collegial culture within the School, as well as formal School events such as the Internal Academic Seminars, which are explicitly intended to identify collaborative opportunities. Several staff members also collaborate with researchers from other disciplines (as detailed in section e).

### b. iii) Measures to facilitate, promote and sustain research culture

**School structure and meetings:** The School convenes a Strategy Group that includes all professorial staff and the Directors of Research (DoR) and Enterprise (DoE). The School also convenes a Research and Enterprise Committee. Both are held three times per year.

**Research seminar events:** The School hosts fortnightly research seminars featuring leading psychological researchers from the UK and abroad. Our three research groups each run a fortnightly seminar series. Other specialist groups (e.g., on Emotions, Political Psychology and Group Processes) meet several times a term. All of these seminars include discussions of ongoing research by our staff and specialist visitors, and are open to MSc and PhD students and all staff.

**Engagement with the University research environment:** The Pro Vice Chancellor's Research series is a regular set of seminars organised by the Research Office at which researchers present their work to interdisciplinary audiences from within and outside the University. Staff members within the School have taken part in this series and research funding has resulted from the presence of external partners in the audience (e.g., research on environmental engagement with KCC). The Faculty also distributes a list of research talks and events across disciplines. Several staff are also members of cross-disciplinary research centres in the University (e.g., on medical ethics, language, cyber-security and parenting culture) which run frequent discussion groups and seminars. This has contributed to success in funded research projects (e.g., Douglas's collaboration with Engineering and Digital Arts and Roke Manor research, funded by DSTL).

**Funding:** The School grants all academic staff £1,000 annually to assist with research and dissemination costs, and issues generous overheads from research grants. Researchers are eligible for Faculty funding for grants up to £5,000, and 14 researchers have benefitted from this since RAE2008 (totalling £25,172). Staff members can also benefit from a University fund to support the development of large, complex interdisciplinary funding applications. The School also has a seed fund for grants of £1,000, with priority given to research likely to lead to external funding applications and cross-disciplinary research.

**Enhanced recruitment of research students:** The School has been successful in its major objective of securing sufficient external funding to sustain a critical mass of PhD studentships. This has been achieved via the strategies outlined in section c. ii, including co-founding the ESRC-accredited South East Doctoral Training Consortium (DTC, with Reading, Royal Holloway and Surrey) as a centre of excellence for social science postgraduate research training.

**Research Experience Scheme:** In 2009 we introduced a Research Experience Scheme in which second year undergraduates volunteer 50 hours (4 hours/week, for one term) assisting staff with projects. Over 150 students have taken advantage of this opportunity. This typifies the integration of our research and teaching strategies, and motivates and engages students in research through early exposure to techniques, facilities, ongoing research projects and our research culture. Also, it has already facilitated journal publications (e.g., for Ferguson and Stoeber).

### b. iv) Future plans

The School's future research strategy is consistent with the University's Research and Impact Strategy (2013-2016), which prioritises innovative and world-leading research that has a positive impact regionally, nationally and internationally. Our main objectives are to:

- *Reinforce our position as a premier international centre of Social Psychology.* We aim to consolidate our position in this field by capitalising on an increasingly established staff profile to pursue large grants. We also plan to recruit a further professorial colleague in intergroup relations or social cognition, to complement and expand existing strengths.

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- *Build on the critical mass and successes of the Forensic Psychology group.* Our aim is to obtain funding for research interests in gangs and aggression (specifically following the appointments of Alleyne, Ó Ciardha and Vasquez) and to recruit a senior colleague in domestic violence or investigative psychology to further expand this group's expertise.
- *Capitalise on investments in equipment, infrastructure and staff to develop as a centre of Cognition and Neuroscience.* We will recruit a senior researcher in neuroimaging or neuromodulation to exploit current and planned investment in research facilities.

In the next five years, the School plans to capitalise on its expanded capacity (e.g., in the rapid growth of research funding and research students). Further expansion of laboratory facilities commenced in 2012/13 with the addition of two more EEG labs, a Transcranial Magnetic Stimulation (TMS) lab and control room, as well as a new large, flexible research space (investment of £350k). The School is also committed to supporting staff members' research and networking activities through incentives such as personal allowances, devolution of overheads, seed funding, pursuing opportunities for funded PhD studentships and by improvements in infrastructure, also with the support of the University. New members of the School will be mentored and encouraged to pursue large research grants. Through funded meetings and liaison with the Kent Innovation and Enterprise (KIE) office, we will consolidate relationships with external partners such as DSTL, age charities and NHS Hospital Trusts to open more opportunities for impact. One example of these efforts is our recruitment of a permanent, full-time Enterprise and Employability Officer (EEO) from 2013 to identify collaborative funding opportunities with non-academic partners.

**c. People, including:****i. Staffing strategy and staff development*****Staffing in the context of our research strategy and physical infrastructure***

Following RAE2008, a focused effort was made to recruit researchers in Cognition and Neuroscience. Eight new staff members were recruited into this group, namely Abbot-Smith, Bergström, Bindemann, Brooks, Ferguson, Kelly, Nurmsoo and Williams. This has allowed the creation of sub-groups of researchers working on cognate research questions. For example, the School now has a significant presence in cognitive development (Abbot-Smith, Ferguson, Kelly, Nurmsoo, Williams), attention (Bindemann, Ferguson, Sharma) and imaging (Bergström, Brooks, Ferguson). Several of the new staff have interests in clinical and forensic application (e.g., Abbot-Smith, Kelly and Williams on developmental disorders; Bindemann in forensic face recognition). These appointments have been facilitated by extensive infrastructural investment (section d). The Social Psychology group has been broadened and sustained by the appointments of Brown (survey methodology, measurement), Cichocka (political and intergroup processes), Heflick (existential psychology, objectification), Kerr (group processes), Swift (ageism), Uskul (culture, cognition and self), Weick (social cognition) and the promotions of Giner-Sorolla and Stoeber to Professor. The new Forensic Psychology group has been established with the appointment of Pina (sexual harassment), Vasquez (gangs and aggression), Alleyne (group-related offending), Ó Ciardha (cognitive aspects of offending) and the promotion of Gannon to Professor.

***Development and support of staff's research work***

Opportunities for developing and realising new research ideas are provided through Study Leave and Academic Leave of Absence, which are open to all staff via an application process at first School and then University level. Within the University, significant support is made available for professional development for all research staff through facilities such as: Learning and Development (leadership programmes, equality and diversity training); the Unit for the Enhancement of Learning and Teaching (UEL, accredited academic development programmes); the Graduate School (a Researcher Development Programme for postgraduate students and postdoctoral researchers), KIE (encouraging external partnerships) and Research Services (Grants Factory meetings to develop grant applications, and an Early Career Researcher Network).

Consistent with the University's research strategy, in 2008-9 the School implemented an individual research plan process in which staff members detail their plans for outputs, grants and dissemination. Meetings take place with the School's DoR to discuss these plans and consider opportunities and obstacles. The DoR also meets with senior technical and administrative staff to evaluate the School's research capacity and requirements. The DoR consults with the Head of

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School (HoS) and with the University Research Office to help shape key objectives for individuals' research profiles and the research profile of the School as a whole.

Several strategies have supported our increased success in publications and grant awards. The School's workload allocation model (WAM) awards credit for journal publications, for making grant applications and for successful awards of research or enterprise grants (credits are weighted by prestige of journals and size of award). The WAM has been improved since RAE2008 and research productivity is now more significantly rewarded with lower administration and teaching loads. The School also provides mentorship and internal peer-review support. All grant applications are subject to internal quality control review processes, where two or more experienced grant holders and the DoR read and provide feedback prior to submission.

### **Early career researchers (ECRs)**

The School currently has 11 ECRs, all of whom meet regularly with an assigned research mentor. In keeping with the Concordat (e.g., equipping and supporting ECRs to adapt to the research environment), probationary staff members are assigned a teaching and administration workload that is reduced by 25% compared to non-ECRs for the first three years of appointment. Grants awarded by the Faculty of Social Sciences have prioritised ECRs and many features of the School's research infrastructure (e.g., the RES scheme) facilitate ECR research activity. The School's research group structure, rich diet of seminar events and international speakers, and internal mechanisms such as the mentorship and peer-review of grant applications and co-supervision of research students by senior staff provide opportunities for mentoring of ECRs. In May 2013 the University attained the European Commission HR Excellence in Research Award, recognising its support for staff career development.

### **Equalities and diversity**

The University's HR strategy and policies support the research environment through the effective recruitment, selection and induction of staff; good employment practices, including a mediation scheme and work/life balance initiatives; a promotions process that rewards all aspects of academic excellence; equality and diversity networks to support equality in age, disability, religion, race, sexual orientation and gender, and proactive equality and diversity initiatives, such as the Athena SWAN charter. The University has joined and is committed to the principles of the charter and has applied for a bronze university-level award. Building on this, the School has created a working group, which has already begun the task of enabling an Athena SWAN school-level award submission to follow success at University level. The School is represented on the University of Kent's LGBT Society and submitted researchers are of 18 different nationalities.

#### **c. ii. Research students**

PhD student numbers have increased by 50% since RAE2008 (42 currently enrolled, compared to 28 at the end of 2007). Our students' training and research is fully supported at the level of the School, the Doctoral Training Centre and the University.

**School:** Students are required to attend scheduled seminar events including the School's research seminars and researcher skill development seminars. The School and the University have co-organised several events for ESRC DTC students (open to all postgraduates, e.g., on Hierarchical Linear Modelling). The School has established a Psychology PhD Network that provides web-based videos (e.g. on E-Prime), and workshops on topics such as use of our laboratories and equipment, research ethics, CV writing, and publication. Also, the School holds a postgraduate research conference twice a year where prizes, judged by a panel of staff, are awarded. All students are encouraged to attend conferences and have an annual budget of up to £750 per year for this purpose. The School has also supported a number of ESRC-funded internships (e.g., Scottish Government, Parliamentary Office of Science and Technology), and ESRC, EPS and BPS-funded international research visits (e.g., Harvard, Maryland, Washington State). Student progress involves a probation review at nine months, a second year review at 21 months and a submission review three months prior to submission. We use an online system to monitor supervision and student progress, overseen by the Director of Postgraduate Studies-Research (a role separate from the Director of Postgraduate Studies-Taught). These provisions and all relevant information are contained in a Research Student Handbook.

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**Doctoral Training Centre:** The South East DTC provides research skills seminars and mini-conferences and also acts as a portal through which ESRC research skills training and other training is accessed by all students, including those who are not ESRC-funded. Highlights include a variety of statistical workshops and a summer conference in which students present their work in PechaKucha format. The DTC makes available research training provided by all four Psychology departments. We have won three studentships per year from the DTC, of 24 available annually across all of the Social Sciences in the four institutions.

**University:** Established in 2008, the University's Graduate School works in partnership with academic Schools, Faculties, central service departments and the Kent Student Union to enhance the quality of the postgraduate experience. It also offers training and career development in line with the Researcher Development Framework and supports career development through courses and funding an annual research festival and courses. From 2012/13 the University introduced 50th anniversary studentships funding 100 PhD studentships across the University commencing each year for three years. The School obtained eight of these studentships in 2012/13.

**Highlighted achievements of doctoral students including CASE awards**

All PhD students are directed and supported to publish in peer-reviewed journals. We engage them as research collaborators and 15 of our outputs in REF2 are first-authored by PhD students. These outputs include Hopthrow2 (*JPSP*), Sorolla3 (*Psychological Bulletin*) and Sharma1 (*Journal of Psychopharmacology*). In addition, one of our students (Meleady) has co-authored a paper in *Science*. One student (Travaglino) has founded a journal (*Contention*) and organised an interdisciplinary conference (TAISP) on social protest. Our students have sat on committees of the Society and Personality and Social Psychology and the BPS, and have co-edited the UK's postgraduate psychology journal, PSYPAG. Our PhD students' work has been funded by four ESRC CASE awards (with EHRC, Age Concern, People United, and Age UK, all with authorships of associated policy reports) and an HEA award. A PhD in Psychology from Kent is an excellent foundation for a research career: 91% of students who completed between 2008 and 2013 went on to obtain either research positions (54% in Universities including Oxford, Cambridge, University of Amsterdam, Kings' College London, and UCL; 5% in private/third sector) or lectureships (32%).

**d. Income, infrastructure and facilities****Income**

Our 34% increase in annual research income since RAE2008 reflects and supports the growth in our research. A highlight includes the ESRC grant of £513k to fund research on firesetting (see also REF3b). Funding for research stems from a wide range of sources (highlighted in section b), and includes a fivefold increase from UK industry, commerce and public corporations, reflecting the increasing diversity and impact of the School's research. Further, our international collaborations (e.g., the Eurage project on ageism) have been funded by FP7, Marie Curie, ESRC, and the national research councils of Australia, Portugal, and Spain. Other major projects have been supported by grants held by principal investigators in other Schools, including Wilkinson's work as co-investigator on a £430k AHRC project on interventions for autistic spectrum conditions. In addition to the research income reported in REF4b, our researchers have been supported by grants worth over £2 million pounds since RAE2008, awarded by funders such as NASA, Stanford University, Harvard University, Royal Society, BA, and the US National Institute of Health.

**Infrastructure and facilities**

The School's strategy to build research capacity is manifest in the increase in the amount and quality of research infrastructure and facilities. Laboratories, equipment and software now support a high volume and diversity of research.

**Laboratories:** The School has a suite of over 50 research laboratories following the development of new facilities at the end of the RAE2008 period. The Child Development Unit was launched in 2009 with investment of £62k. Since its inception, 2,484 children have been signed onto its database. The facility includes a kitchen, soft furniture, computers and printer, costumes, toys, intercom, touch-screen interfaces, Tobii eye-tracker and studio, and a psychometrics pack. Further developments are under way, including a flexible research space, and the development of two additional EEG labs, a TMS lab and a control room, with a QR investment of £350k.

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**Laboratory equipment:** In order to broaden the base of its research, increase capacity and attract new staff, the School has acquired additional laboratory equipment, including a Biopac MP150 Data Acquisition System; 2 x Tobii Eye Trackers; 2 x SR Research EyeLink Eye Trackers; Arrington ViewPoint Eye Tracker; 2 x Brain Products QuickAmp EEG actiCAP Systems; Brain Products PowerMAG research 100 TMS System; 2 x Magstim tDCs units; and a WorldViz Virtual Reality Suite. Much of this has been funded by QR investment (e.g., £400k in 2009-10).

**Software:** The research activities of staff and students are well supported by an extensive suite of specialist software, including Mplus (statistical modelling software); Qualtrics (web-based survey software) and E-Prime (experiment builder). The University also licenses a wide range of software including Endnote; Exceed – Open Text; Maple; Matlab; Minitab; Nvivo; SAS; Sigmaplot; HLM6, and SPSS – PASW Statistics which are widely used to facilitate research within the School.

**Governance:** The School's Ethics Committee reports to Faculty and University Ethics Committees. Researchers submit applications for ethical approval through an online system, which randomly distributes applications to two committee members for review. Turnaround is immediate for research that does not raise any ethical concerns (e.g., deception, vulnerable population), a week for a modification of a previous project, and two weeks for a new project that raises ethical issues. The School's Research Committee (headed by the DoR) reports to the HoS and to the School Committee and is also represented on a Faculty Research Committee. The DoR consults with the HoS in the formulation of an annual Research Plan for the School.

**Facilities for research students:** Every research student is given a PC or Mac with their own desk in an office shared with one or two other students. The School funds additional specialised research infrastructure for students, including regular writing retreats for PhD students and a fund to access international participant pools via Mechanical Turk. The Faculty provides a top-up fund for PhD students' research costs (our students' success rate thus far is 100%).

**Other facilities:** These include a Research Participation Scheme in which undergraduates take part in research for course credit under ethical parameters, and the Kent Adult Research Unit, which is database of research volunteers (including older adults) from the local community. Further, the University library stocks almost all relevant journals and electronic databases.

**e. Collaboration and contribution to the discipline or research base**

The School's research objectives centre on developing effective external relationships, both within and outside the HE sector. These collaborative relationships are supported by the resourcing and workload strategies described in sections b and c.

**Fellowships and committee memberships:** Several of our staff members have been appointed to prestigious committee positions and have been awarded esteemed fellowships. For example, Abrams is a Fellow of the British Academy and Council member of the Academy of Social Sciences. Abrams, Douglas, Giner-Sorolla and Uskul are Fellows of the Society for Experimental Social Psychology (SESP). Wilkinson is one of few UK academics to be admitted as a Faculty Member of the American Congress of Rehabilitation Medicine. Staff members have sat on national committees including the British Psychological Society (BPS) Research Board (Randsley de Moura) and the cognitive section of the BPS (Johnston). Abrams is the chair of SPSSI and is a fellow of the BPS Board of Trustees, SPSSI, the Society for Personality and Social Psychology and the American Psychological Society. He has also sat on the ESRC Grant Assessment Panel, was a panellist for the Global Uncertainties Programme (ESRC) and the European Research Council grants scheme, and is currently serving as a REF sub-panel member.

**Wider contributions to the discipline:** Members of the School have made significant broader contributions to the discipline of Psychology. One highlight is Giner-Sorolla's work on replication and scientific integrity (the Centre for Open Science's Reproducibility Project), which involves efforts to improve methodological practices across psychology. This has resulted in co-editorship of a special issue of the *Journal of Experimental Social Psychology* and publications on scientific replication (in *Psychological Inquiry* and *Perspectives on Psychological Science*), as well as invited talks at APS Symposia. Others' contributions include: presentation and hosting of ESRC Festival of Science events on ageism for the European Social Survey (Abrams, Cameron, Swift); the creation

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of the UK Social Cognition Network in partnership with the ESRC providing seminars, networking opportunities and web resources (<http://www.socialcognition.co.uk/>) (Weick); an ESRC-supported ECRs' network in experimental pragmatics (Ferguson); a specialist report to the ESRC International Benchmarking Review of Psychology in 2010 (Abrams); a policy briefing on ageism to the European Parliament (Abrams) and the development and online publication of methodological tools for researchers associated with papers in the APA's *Psychological Methods* (Brooks, Brown).

**Editorial and peer-reviewing work:** Members of the School have been Chief Editors of *Anxiety, Stress, & Coping* (Stoeber), *Group Processes and Intergroup Relations* (Abrams, Founding Editor), *Psychology, Crime & Law* (Gannon) and the *British Journal of Social Psychology* (Douglas, editor-elect 2014-2017). Many have been Associate Editors including the *Journal of Experimental Social Psychology* (Calogero, Giner-Sorolla), *Quarterly Journal of Experimental Psychology* (Uskul), *British Journal of Social Psychology*, *European Journal of Social Psychology* and *Social Psychology* (Douglas), *Group Processes and Intergroup Relations* (Giner-Sorolla, Kerr), *Social Psychology Compass* (Giner-Sorolla, Randsley de Moura), *Journal of Applied Social Psychology* (Calogero, Weick), *Psychology of Women Quarterly* (Calogero) and *Journal of Sexual Aggression* (Gannon). Staff have edited special issues of *Journal of Language and Social Psychology* (Sutton and Douglas), *Trauma, Violence and Abuse*, *Journal of Sexual Aggression*, *Aggression and Violent Behavior*, *Psychology, Crime and Law* (Gannon and Wood) and *Applied Cognitive Psychology* (Bindemann and Johnston). Abbot-Smith, Giner-Sorolla, Sutton and Weick are members of the ESRC's peer-review college. Other review panel work includes the Marsden Fund, New Zealand Ministry of Science and Innovation and East Kent Hospitals annual project scheme.

**Academic collaborations:** Members of the School collaborate widely with researchers from other institutions, both in the UK and abroad. Some of our more prestigious collaborations involve research with academics at Harvard Medical School, the Australian National University, New York University, Universite Libre de Bruxelles and Cambridge University, and we have a number of honorary staff members from other institutions. The multi-agency cross-European ageism project (Eurage) involves collaboration with Paris V and Lisbon. Outcomes from our collaborations include a research grant won in partnership with Duke Medical School (Wilkinson), a bilateral ESRC/ARC grant with the University of Queensland (Sutton, Douglas) and a Leverhulme grant (Ferguson). Collaborations have been facilitated by infrastructure within the School (e.g., invitations to external speakers, conference travel funds, research funds), and by departmental talks given by our staff (e.g., at Stanford, Oxford, Cambridge, and University of Amsterdam).

**External collaboration or integration with external bodies:** Staff members have developed fruitful collaborations with non-academic bodies. These have resulted in funding (e.g., with DSTL; Douglas, Giner-Sorolla, Hopthrow), several reports for government agencies such as BIS and DWP (Abrams), a report for Lloyd's (Weick) and work within HM Prison Service (Gannon). Much of this research has contributed to the School's impact supported by infrastructure within the School (e.g., EEO) and the University (e.g., KIE) through mechanisms described in REF3a. Further, the School is actively committed to public engagement and our research frequently features in the media. From January 2008 to October 2013, the School has been mentioned in 989 print and online articles in 604 unique titles, with a circulation of nearly 640 million (for a summary of our media coverage, see <http://tinyurl.com/ukcpsymed>). Members of the School have also presented their work at public engagement events such as Café Scientifique (Giner-Sorolla, Sharma, Wilkinson), The University of the Third Age (Sharma, Stoeber, Sutton, Wilkinson), Skeptics in the Pub (Douglas) and the ESRC Festival of Science (Abrams, Cameron, Swift).

**Effective mechanisms to promote collaborative research:** In addition to the activities described above, our collaborative activity includes a strategic partnership with the Department of Computing Sciences through the CCNCS. This new initiative has been supported by two RCUK postdoctoral fellowships and provides a significant development of our cognition research.

These achievements illustrate the strong national and international profile of the School. We make many and various contributions to our discipline and are embedded in international networks of scholarly activity. They reflect our past successes and provide a strong platform for future success.