

<p>Institution: University of Warwick</p>
<p>Unit of Assessment: 4</p>
<p>a. Overview</p> <p>Since early 2012 the Department of Psychology has been engaged in a period of substantial growth following an extensive external research review initiated in 2011. The review was the basis for a major research-focused, strategic expansion and reorganisation of the Department. Expansion was enabled by a major new investment by the University and involved a 30% increase in academic positions (seven new posts were created), a threefold increase in the number of departmentally funded PhD studentships, and expansion and refurbishment of laboratory facilities. Reorganisation of research activity involved the formation of a formal, three-group structure designed to (i) leverage our existing strengths and target staff recruitment so as to more effectively align ourselves with existing research priorities and respond to changes in the research funding environment; (ii) provide a framework for effective research management and for the training of research students and junior staff; and (iii) foster research collaborations. The Groups are as follows:</p> <ol style="list-style-type: none"> 1. The Behavioural Science Group is concerned with behavioural science and its application to human welfare, encompassing economic and consumer psychology, decision making and health related behaviours. 2. The Lifespan Health & Wellbeing Group addresses physical and mental health and developmental adaptations across the lifespan. 3. The Language & Learning Group studies the acquisition of language and non-verbal communication, and the causes of language and literacy impairments. <p>Each group is led by a senior academic who manages and monitors the group's activities, and who sits on the Departmental Management Committee to advise on where future research investment would be most important and effective.</p> <p>b. Research strategy</p> <p>Our aim is to (1) generate theoretically motivated research of outstanding quality that is at the cutting edge of the discipline and capable of substantial academic impact; (2) foster a vigorous and supportive research culture that provides a world class training environment for students; and (3) use basic research as a foundation for addressing applied problems, identifying and engaging potential research users and communicating with the wider community.</p> <p>Our strategy is (A) to focus research around a set of core areas in which we have established or emerging strength and that not only align with current research priorities, but are also central to the future development of the discipline; (B) to expand research activity in health and wellbeing with an emphasis on developmental pathologies, understanding protective factors and resilience and the application of research findings; (C) to foster the application of cognitive science to real-world problems; (D) to recruit outstanding researchers with a priority for hiring relatively early career scientists whose skills deepen and broaden our expertise; (E) to extend and improve our research training environment in order to provide students and early stage researchers with cutting edge research skills and an intellectually stimulating, supportive research culture; (F) to continually seek to extend and improve our research facilities to ensure that they are of sufficient quality and size to support research at the highest level; and (G) to reward research activity and success by freeing up time via (limited) reduction of admin and/or teaching loads (the department now implements a points-based workload formula) and feeding to PIs a proportion of the overheads received by the Department.</p> <p>During the assessment period the strategy has led to</p> <ul style="list-style-type: none"> • An external research review and the subsequent formation of the research groups, each with an outward facing focus to promote engagement with the public, research users and funding bodies. The Behavioural Science Group is closely aligned with the ESRC priority Influencing Behaviour and Informing Interventions; the Lifespan Health and Wellbeing

Group is aligned with RCUK and European priorities in human mental health and wellbeing from infancy to old age; the Language and Learning Group is aligned with research priorities of the ESRC, the British Academy and charitable bodies (e.g. Leverhulme Trust and Nuffield Foundation) in intellectual skill acquisition, language acquisition and educational progress. With our expertise in longitudinal data analysis, we are well placed to take advantage of large scale longitudinal database facilities created by funding bodies in the UK and Europe.

- Appointment of 12 new academic staff – more than half of the total submitted – in language and learning (**Adelman, Kita, Messenger, Wonnacott**), lifespan health and wellbeing (**Roberts, Tang, Haworth**) and behavioural science (**Fincher, Hills, Ludvig, Olsson, Sanborn**). Eight of these appointments were at the junior (assistant professor/lecturer/research fellow) level.
- The central involvement of psychology in the University-wide interdisciplinary initiative in Behavioural Science – the Warwick Behavioural Science Global Research Priority (GRP, <http://www2.warwick.ac.uk/research/priorities/behaviouralscience/>) – that involves Warwick Business School and the Department of Economics.
- Substantial external funding for collaborative and interdisciplinary research projects/initiatives with other departments and institutions. Highlights include the ESRC funded Network for Integrated Behavioural Science, the Leverhulme funded Value project, the UK Household Longitudinal Study, the ESRC Secondary Analysis Initiative (SDAI) and the Bavarian Longitudinal Study.
- The establishment of large international resources for research on development, individual differences and biomarkers.
- The development of close links with stakeholders (e.g. All Party Parliamentary Groups, charities, media) to promote research impact and aid translational activities.
- An ongoing development of a new suite of research laboratories based on a substantial investment by the University (detailed in section d).
- An increase in the number of departmentally funded PhD studentships (from 2 to 6 per annum) and the Department being part of the ESRC Warwick Social Sciences DTC.

Plans for the next 5 years: We will (1) further develop each of our three groups so that they are all well established and internationally renowned in their respective areas; (2) further develop the interdisciplinary links of the groups, both within the University and beyond; (3) continue to improve upon our established reputation for high quality, theoretically motivated research; and (4) expand the exploration and development of real-world applications and impact of our basic research. We will continue to develop our successful strategy (items A to G listed earlier) as follows:

- Build capacity by focusing on research students and early career researchers: we will develop aspiring pre-doctoral students' interests in a research career by providing opportunities for hands-on research experience through UG research placements and research placement modules for Masters students. We will encourage early career researchers to obtain fellowships either from the university (e.g. those available through the Institute of Advanced Studies) or from external bodies such as Leverhulme and the British Academy.
- Further develop a focus on using and creating large-scale data archives in all three groups. We will take more advantage of large-scale longitudinal research facilities created by national and international bodies.
- Make new appointments in the context of the new 3-group structure so as to ensure complementarity of expertise and the existence of credible research collaborations that will be in a strong position to obtain large-scale funding.

The establishment of the research groups underpins our plans for the future; the groups and their structure are described below.

Group structure: Each group is a vibrant research community comprising teams of researchers at all levels of seniority supported by quality research facilities and with a regular programme of research stream meetings and away-days. All members of a group are expected to attend these

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meetings (including PhD students), and members of the other groups are encouraged to participate (the Department also organises an external and an internal seminar series). The group structure has in-built flexibility to allow members of one group to contribute to research in other groups. Departmental funds, laboratory facilities and studentships are assigned to groups rather than individuals and each group develops and assesses bids for University and external funding. The position of director of research no longer exists as this role is now taken by the group leaders. Group research strategy is formulated by the group leaders in consultation with the departmental management committee.

Behavioural Science (Lead: **Brown**, Academic staff members: **Fincher, Hills, Ludvig, Olsson, Sanborn, Stewart, Watson**.) *Overview:* Group members have international reputations in cognitive and behavioural science. The group is interdisciplinary in nature and plays a central role in the University's GRP in Behavioural Science (**Hills** is co-director), which supports cross-departmental collaborations within the University by providing a focus for research activity and seed funding for interdisciplinary projects. Members of the Group work closely with colleagues in Warwick Business School (WBS), Economics and, more recently, Computer Science and Warwick's Centre for Complexity Science. A key aim is to bring basic research in attention, perception, cognitive science, evolutionary psychology, and judgement and decision-making to bear on real-world problems.

Highlighted achievements of the group and/or group members: Members of the group have an excellent record of publication in leading specialist and general journals (including *Behavioral & Brain Sciences, Cognitive Psychology, Proceedings of the Royal Society, Psychological Review, Psychological Science*) during the assessment period. The group has recently achieved considerable success in attracting funding through new collaborative links and interdisciplinary approach. With WBS, we are part of a new £4 million ESRC-funded Network for Integrated Behavioural Science. The 5-year grant (commenced December 2012) is shared with the Universities of Nottingham and East Anglia and exemplifies our strategy of bringing expertise in cognitive modeling to bear on problems in economics and complexity science. A substantial award from the Leverhulme Trust (£902K) commenced October 2012 on the topic of "value" (joint with WBS). This grant exemplifies the added value we have been able to obtain through interdisciplinary collaboration with colleagues across the University.

Strategic developments: The group has achieved wider interdisciplinary engagement within and beyond Warwick to leverage our strengths. New staff appointments during the assessment period have all been strategically focused and expand departmental expertise into the newest areas of cognitive modeling, including Bayesian theory, reinforcement learning, bounded rationality, and evolutionary simulations. **Sanborn** (previously at the Gatsby Computational Neuroscience Unit, UCL) has strengthened our cognitive modeling capability while introducing a strong Bayesian perspective. **Hills** joined us from the University of Basel and extends our modeling expertise into the domains of knowledge representation and language acquisition using network analyses and enables strong links with the Language and Learning group and the Warwick Centre for Complexity Science. **Ludvig**, who joined us from Princeton University, comes from a reinforcement learning tradition and brings expertise in computational modeling of the neural basis of cognitive function. **Olsson** (previously at the MPI for Human Development in Berlin) was chosen to add depth to our cognitive expertise and links us to the important and growing tradition of research in fast and frugal heuristics, which is central to engagement with real-world applications of behavioural science. **Fincher** (previously at Glasgow) adds to our ability to make use of large databases, and his expertise on the evolution of different types of society meshes well with a developing stream of work on the evolution of cooperation (together with economics and WBS) and the interface between cognition and social structure. In this context we anticipate new collaborations with recent WBS appointments (e.g. **Melis** and **Winkielman**, both included in our return).

Lifespan Health & Wellbeing (Lead: **Wolke**, Academic staff members: **Haworth, Maylor, Roberts, Schlaghecken, Tang, Tresilian**.) *Overview:* The overall aim is to study health and wellbeing across the lifespan and to develop a better understanding of the key relevant processes and mechanisms. A basic strategy is to exploit large-scale longitudinal databases and combine longitudinal and epidemiological approaches with experimental studies to test causal explanations

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and discover mechanisms. The aims and strategy of the group are closely aligned with the University's Global Research Priority Programme in Health (Science and Technology for Health, <http://www2.warwick.ac.uk/research/priorities/scienceandtechforhealth/>) that links and supports researchers from across the University including Warwick Medical School, the Institute of Digital Healthcare, Chemistry, Life Sciences, and Mathematics.

The group brings together an internationally known and experienced research leader (**Wolke**) in the field of longitudinal epidemiological research with a range of researchers who are emerging leaders in sleep and pain research (**Tang**), genetic influences on wellbeing (**Haworth**), and study of mechanisms using experimental approaches (**Roberts**). The group also includes individuals with strong international reputations in ageing (**Maylor**), cognitive control (**Schlaghecken**) and sensorimotor control (**Tresilian**).

Highlighted achievements of the group and/or group members: During the assessment period, members of the group have an excellent record of publication in leading specialist and general journals (including *Archives of General Psychiatry*, *British Medical Journal*, *JAMA Psychiatry*, *Journal of Neurophysiology*, *Journal of Physiology*, *Molecular Psychiatry*, *Pediatrics*, *Proceedings of the Royal Society*, *Psychological Science*) The assessment period has seen the establishment of large international resources for research on development, individual differences and biomarkers. This has been possible by linking with the University of Essex and co-leading on applications leading to the acquisition of £80 million for the UK Household Longitudinal Study from the ESRC, the Large Capital Funding Facility, and UK government departments since 2008. Furthermore, there have been focused MRC and Wellcome grants on psychopathology assessments (psychosis, depression) in the Avon Longitudinal Study (University of Bristol), contribution to the content of the 11-year assessment wave of the Millennium cohort and co-leading of new multi-million funding for follow-up studies of very or extremely preterm children (Bavarian Longitudinal Study, BLS, with the Universities of Munich and Bonn; the EPICure Study with UCL).

Strategic developments: The group has successfully developed major collaborative links with the new Division of Mental Health and Wellbeing within Warwick Medical School and both are participants in a major EU 7th framework grant of over €6 million (€1.7 million to Warwick). Two significant appointments have recently been made. **Haworth** (previously at the Institute of Psychiatry) extends the breadth of our longitudinal research to the genetic and environmental factors underlying wellbeing (via the Twins Early Development Study, TEDS) and how genetic and environmental factors influence the effectiveness of interventions. **Tang** is a qualified clinical psychologist who brings an expertise in the study of sleep disorders and coping with chronic pain. In recent years **Wolke** has pursued a strategy of establishing biomarker assessments off site in several ongoing studies (BLS, EPICure, ALSPAC and UKHLS) and we plan a further appointment (approved by the University) with expertise in biomarkers to exploit these assessments and establish expertise in biomarker assay and analysis.

Language & Learning (Lead: **Kita**, Academic staff members: **Adelman**, **Carroll**, **Messenger**, **Wonnacott**.) *Overview:* The Language Group has proven strengths in longitudinal, experimental, and computational research on processing and learning of language and nonverbal communication, as well as applications of language research to the classroom. Two key aspects of the approach are (1) to combine computational modeling and empirical studies, and (2) to bring theories and techniques from theoretical research to more practically oriented research on language learning and use across the lifespan: we apply basic research to practice, through classroom based work and links with local education practitioners.

Achievements of the group and/or group members. During the assessment period, members of the group have an excellent record of publication in leading specialist and general journals (*Cognition*, *Journal of Experimental Psychology: General*, *Journal of Memory and Language*, *Psychological Review*, *Psychological Science*). We have achieved considerable grant success over the assessment period with research grants and fellowships awarded by the ESRC (six), BBSRC (one), Leverhulme (one), Nuffield (one), a large equipment grant from BBSRC, and multiple smaller grants. Our research has influenced government recommendations in teaching dyslexic children (Rose report on dyslexia provision, 2009), an ongoing review of primary school accountability, and our recently published book aimed at specialist teachers has allowed us to disseminate our ideas into practice. We have also

established a Reading Research Network linking several universities across central England.

Strategic developments: The strategy of the group is to develop the key strength in research on language development, while maintaining diversity of methodological expertise and investing in new growth areas. Our recent appointments reflect this strategy. **Kita** has added expertise on experimental and observational studies of gestural communication, a new growth area in psycholinguistics, and on language development. **Wonnacott** and **Messenger** have a training in linguistics and experimentally study language development in children. **Adelman** has brought in expertise in adults' lexical processing, a central research area in psycholinguistics. He (as well as **Hills** in the Behavioural Science Group) also provides expertise in cognitive modeling. The group's research on language development has focused on 3-10 year olds. In 2013, the University made a strategic investment to establish a facility for research on language development in infancy, create new testing spaces, and support a postdoctoral research fellow and a research assistant. The Group is planning to establish an international doctoral training network on language development with European funding, and to further develop impact on educational policies via regular teacher workshops and via collaboration with researchers in the Centre for Educational Development, Appraisal & Research in the University.

c. People, including:

i. Staffing strategy and staff development

Every research active member of staff belongs to a research group and our strategy for recruitment and selection is now to make appointments that add value and complementary expertise to existing strengths within groups. Probationary academic staff members are all assigned an experienced mentor and are protected from heavy teaching or administrative duties: a teaching/administration load of 20% is allocated in the first probationary year and increased over the probation period (normally 5 years) to reach 100% upon completion. Annual appraisals are held for both probationary staff and promoted staff. The Department and University fully subscribe to the Concordat to Support the Career Development of Researchers. The University has recently been awarded the HR Excellence in Research Award. Equality and diversity issues are monitored and addressed by our Athena Swan Committee (the Department has a Bronze Award and the University recently received an institutional Silver Award).

Newly appointed academic staff are provided with generous start-up packages that include a standard fund of £15K, use of the shared facilities of their group and negotiated additional resources that include dedicated laboratory space (if required). Recently appointed junior (**Adelman, Tang, Elliot, Fincher**) and more senior staff (**Haworth, Kita**) have been provided with specially constructed, dedicated laboratory spaces. Several recently appointed staff have seen their research benefit considerably from internal University funding through the Research Development Fund (**Hills, Tang, Wonnacott**). The University's Study Leave system is extensively used (a total of 15 terms of study leave have been taken over the assessment period). Excellent support for research grant applications is provided by the University's research support services.

Group leaders liaise with contract Research Staff to ensure their assimilation and development. Research Staff contribute fully to group activities, are invited to attend Department council meetings and to participate in Annual Review. Robust mechanisms for monitoring and advising on progress, career development, and future employment prospects of contract research staff are in place. The University Forum for research staff serves a general networking function and provides a focus for gathering Research Staff views on issues such as induction, training and development opportunities.

The University's Institute of Advanced Study (IAS) provides support for Early Career Researchers. The IAS is dedicated to enriching the University's research environment and it provides substantial funds for the support of early stage postdoctoral scholars and completing PhD students. Its Early Career Fellowship programme supports Warwick doctoral candidates in the transition phase between their doctoral and postdoctoral careers (6 Departmental PhD students have benefitted from this programme during the assessment period), its Global Research Fellowships aim to provide career development opportunities for early stage postdoctoral scholars, and its Research Networks Awards provide seed funding for new Warwick-based interdisciplinary collaborative research networks and collaborative exchange visits (e.g. NIH Bethesda).

Other important University-wide support for researchers includes the Wolfson Research

Exchange (WRE) and programmes offered by the Learning and Development Centre (LDC). The WRE is a community space that offers peer support and a forum for interdisciplinary collaboration. It is open to all Warwick researchers as both a work space and meeting space. The LDC works collaboratively with other providers, both inside and outside the University, to enable and deliver high quality learning and development solutions for research active staff. Funding is available from the staff development fund to commission and deliver learning opportunities across the whole early- to mid-career researcher community. Funding also supports the creation and development of researcher networks at all career stages. Programmes are mapped against the Vitae Researcher Development Framework for enhancing the careers of researchers developed in consultation with academic and non-academic employers.

ii. Research students

There has recently been a substantial increase in the vitality of postgraduate research and training. Additional PhD studentships are funded by the Department (increased from 2 to 6 per year in 2012), the ESRC DTC, and by external research grants and collaborations with outside bodies (e.g. **Watson's** collaborative studentship with the Dorset Police). Two research led Masters courses started during the assessment period: the Masters in Behavioural and Economic Science (MBES taught jointly with the Department of Economics and Warwick Business School) is currently in its 3rd year of operation; the Masters in Clinical Applications of Psychology is currently in its 4th year of operation. A new research Masters course (Masters in Psychological Research) began this year. One important role for these new courses (particularly the research Masters and the MBES) is to act as "feeder" streams for the recruitment of PhD students.

All PhD students are members of a research group. They attend and present at group meetings. At least one presentation to the whole department via the internal seminar series is expected. Postgraduate students organise an annual Postgraduate Research Day at which they present their research work to an audience of staff and other postgraduates.

The Department's Postgraduate Supervisory Committee (PSC) monitors and makes recommendations on issues relating to postgraduate education including admissions, training, progress and teaching/supervision quality. The standard pattern of supervision is for two members of staff to share responsibility for directing the progress of research and all students are assigned a mentor in addition to the formal supervision team. All PhD students have full access to the Department's shared laboratory facilities (described in d) and are allocated £3K to support their research and special cases for further funding are considered by the PSC and HoD. Students' progress is monitored at the Departmental level in two ways: (1) students complete brief interim reports that are issued by the Department five times per year and submitted to the supervisor(s) who write a short progress summary, the reports are then submitted to the Director of Graduate Studies who checks that progress is satisfactory and reports to the PSC; and (2) students submit a longer annual report, which forms the basis for a meeting of the student with two independent members of the Department (supervisors not present). At this meeting the discussion is focused on the student's research work and progress, their supervision arrangements and any difficulties they have encountered, and for making progression recommendations when appropriate. The Department has a Postgraduate Staff-Student Liaison Committee (SSLC) devoted to resolving concerns of relevance to the postgraduate community. This committee meets four times a year.

The Department is part of the ESRC Warwick Social Sciences Doctoral Training Centre (DTC) programme. In addition to the centrally provided DTC modules, the Department offers a number of subject-specific modules as part of this programme. Overall this provides a broad-based training beyond the specific skills that a student needs to complete his/her particular thesis. The training offered capitalises on our research strengths in behavioural science and our cross-disciplinary links within Warwick. All ESRC funded students are expected to complete this training and non-ESRC funded students are strongly encouraged to engage with it. At University level, the Postgraduate Hub offers dedicated work space in the heart of campus, with access to support all year round. The Hub is equipped with the latest technology and offers spaces for different kinds of events. The University also offers an accredited Postgraduate Certificate in Transferable Skills in Science with a course for PhD students and a second for postdoctoral researchers. These courses are freely available to all PhD and postdoctoral researchers in the Science Faculty and consist of a series of short modules that cover a number of topics including: working in teams, science communication and

scientific writing, teaching, leadership in research, ethics and impact.

d. Income, infrastructure and facilities

Research income: Income to the Department (excluding funds allocated to other institutions/departments in collaborative grants) totals £154K per capita over the assessment period and has provided excellent support for the types of (relatively inexpensive) research that we do. The bulk of the Department's research income has come from ESRC (c. 60% of the total for the period).

Infrastructure and facilities: The Behavioural Science group utilises the cognitive science laboratory suite, which comprises an eye-movement laboratory (including fixed and mobile eye-trackers), a recently installed electrodermal activity (EDA) laboratory, a waiting/reception area and 8 testing rooms. There is a smaller suite with 4 sound-attenuated testing booths and a reception area. The group also has a reciprocal arrangement with the School of Economics and Warwick Business School to share large-group testing facilities. The Department also contributes to the development and maintenance of a large-scale, University-wide participant panel – the DR@W (Decision Research at Warwick) panel.

The new EDA laboratory is part of a recent expansion of the behavioural science facilities and will enable researchers to obtain objective, physiological measures of affective responses to economic stimuli. The construction of a large, multi-seat testing room for the behavioural science group is nearing completion (expected completion date, November/December 2013). The suite will enable simultaneous testing of up to 30 participants. Such laboratories are now essential to examine phenomena such as the development of cooperative behaviour in which groups of participants repeatedly play against each other. In addition we have developed a significant infrastructure for on-line experiments, allowing us to reach beyond the University to large and diverse groups (e.g. serving police officers, credit card holders, American consumers). Within the census period the University has committed over £300K in new laboratory infrastructure and other research facilities for members of the Behavioural Science group.

Members of the Lifespan Health and Wellbeing group utilise various laboratory and other spaces. Several members use the cognitive neuroscience laboratory suite, comprising 9 testing rooms, a reception area, preparation and analysis areas. The suite houses 4 EEG systems, electromyography system and movement tracking systems. Members of the group also have access to special-purpose data analysis facilities, meeting and interview spaces. Work is currently underway on the construction of a dedicated sleep and pain laboratory (expected completion date, November 2013), a facility that will be under **Tang's** direction. Within the census period the University has committed over £250K in laboratory space and equipment for members of the Lifespan Health and Wellbeing group.

The Language and Learning group conduct experimental studies both in the laboratory and in schools and have access to dedicated mobile eye-tracking equipment and portable computers for the latter. A new language and learning laboratory suite is currently under construction under **Kita's** direction (expected completion date, November 2013). This will comprise a dedicated eye-tracking laboratory, two sound attenuated behavioural testing booths, a larger sound attenuated laboratory space suitable for testing infants and young children, a video recording/editing suite and a dedicated reception/waiting room and play area. This new infrastructure and equipment represents an investment of over £150K.

e. Collaboration and contribution to the discipline or research base

Awards and fellowships: **Haworth** and **Hills** are current recipients of British Academy Fellowships; **Maylor** and **Tresilian** were elected fellows of the British Psychological Society (2011); **Kita** was a recipient of the BBSRC Research Development Fellowship (2009-2012); **Sanborn** was a Royal Society Research Fellow (2008 and 2009) and authored the Best Paper in *Psychonomic Bulletin & Review* (2010) for "Exemplar models as a mechanism for performing Bayesian inference"; **Messenger** is a Leverhulme Early Career fellow. **Wonnacott** was a BA postdoctoral fellow from 2008-2011.

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Editorial activities: Almost all of our staff occupy editorial positions on major journals or have occupied them during the assessment period, including: *British Journal of Mathematical and Statistical Psychology* (Stewart), *Developmental and Behavioral Pediatrics* (Wolke), *European Psychologist* (Wolke), *Frontiers in Behavioral and Psychiatric Genetics* (Haworth), *Frontiers in Cognitive Science* (Sanborn), *Gesture* (Kita), *Journal of Experimental Psychology: Human Perception & Performance* (Tresilian, Watson), *Journal of Experimental Psychology: Learning, Memory & Cognition* (Maylor, Stewart), *Journal of Gerontology: Psychological Sciences* (Maylor), *Journal of Memory and Language* (Brown), *Journal of Motor Behavior* (Tresilian), *Journal of Pragmatics* (Kita), *Journal of Research in Reading* (Carroll), *Language & Cognition* (Kita), *Kindheit und Entwicklung* (Wolke), *Management Science* (Stewart), *Psychological Review* (Stewart), *Psychological Science* (Brown, Kita), *Psychology and Aging* (Maylor), *Psychonomic Bulletin & Review* (Stewart), *Quarterly Journal of Experimental Psychology* (Schlaghecken, Stewart, Watson), *Scientific Studies of Reading* (Carroll), *Vulnerable Children and Youth Studies* (Wolke).

Service for national and international research bodies: Almost all staff have reviewed for grant awarding bodies worldwide including ESRC, BBSRC, BMBF (Germany), MRC, NIHR, ERC, NSF (USA), ARC (Australia), Human Frontier Science Program, NOSR (Netherlands), AFOSR (USA), SNF (Switzerland), Arthritis UK. A number of staff serve/ have served on national or international research committees, including: **Brown**, panelist of Romanian National Research Council 2012 (social and economic sciences committee); Member of Hong Kong RAE 2014 Panel (Social Sciences). **Carroll**, Chair, British Dyslexia Association International Conference, 2014. **Haworth**, Coordinator of the international consortium for the Genetics of High Cognitive Abilities. **Kita**, President of the International Society for Gesture Studies (2012-2014); Member of the College of Reviewers for the Program in Perception, Action, and Cognition in the National Science Foundation (USA, 2013-2015). **Tang**, Stream Leader on Scientific Committees of the British Association for Behavioural and Cognitive Psychotherapies and the European Association for Behavioral and Cognitive Therapies. **Wolke**, Scientific Advisory Panel of Action Medical Research; the Scientific Advisory Board of EFCNI – European Foundation for the Care of Newborn Infants (<http://www.efcni.org>); German Neonatal Network (Scientific Advisory Board); UK National Feeding Disorders Forum, Hospital for Sick Children (London).

Research collaborations: All submitted staff are actively engaged in cross-departmental, and cross-institutional collaborations and many of these are international. Highlights include: **Wolke's** involvement in the Bavarian Longitudinal Study (Universities of Munich, Augsburg, Bochum and Bonn) as well as many others across Europe and beyond (e.g. ESRC grant collaboration with Duke University, Great Smokey Mountain Study); **Kita's** ESRC funded project with collaborators at the University of Chicago and BBSRC funded fellowship with collaborators in UBC, Canada. There is also increasing engagement with other external bodies as evidenced, for example, by **Watson's** collaboration with the Dorset Police on driver safety training (which includes an ESRC collaborative studentship), and **Stewart's** collaborations with the UK Credit Card companies and the Financial Conduct Authority.

Interdisciplinary approaches are at the heart of the Department's new research structure, and are facilitated at a University level by the Global Research Priority (GRP) programmes and the University's strategic partnerships with Queen Mary, University of London and the Liverpool School of Tropical Medicine. The GRP programmes are structures that support inter-departmental interactions and collaborations in key areas of international significance (including Behavioural Science and Lifelong Health) by providing a forum for researchers and seed funding for interdisciplinary projects. International engagement and collaboration is supported within the University by the Institute for Advanced Studies (IAS) and the University's strategic partnerships with Monash University (Australia) and New York University (USA). The IAS supports international collaborations through its Visiting Fellowships scheme (which provides financial support for extended visits by international scholars), Incubation Awards (which provide funds for cross-institutional research networks) and Global Research Fellowships scheme (which provides fellowship funding together with resources for international engagement).