



PhD Opportunities in the School of Psychology and Clinical Language Sciences

Here is a list of some of our currently available PhD opportunities within the School of Psychology and Clinical Language Sciences. This document is updated regularly with new PhD opportunities to please check back regularly.

You can also propose your own project that aligns with our research. Find out more about [how to apply for a PhD](#), and [identify and contact a supervisor](#).

Moving together in time: the effects of coordinated movements on physical performance, social cognition and overall wellbeing

Supervisor: Dr Juliane Honisch (j.j.honisch@reading.ac.uk)

Our Social Cognition and Movement Rehabilitation Lab (SCMR) investigates various topics on the role of non-verbal behaviours in everyday conversations, social-cognitive effects of interpersonal synchrony (two or more individuals moving together in time) and explores movement interventions (e.g. dance exercises) for older adults with and without medical conditions.

This project aims to help us further understand the multifaceted benefits of engaging in highly coordinated, synchronous movement activities in a social everyday setting. Depending on the applicant's interests and skills, this project will most likely focus on healthy adults, but there is the possibility of working with adults/older adults (NHS, Royal Berkshire Hospital) with medical conditions which negatively affect their motor control. This work will use a variety of methods, including behavioural and psychophysiological methods, to examine how synchronous movements affect movement performance, social cognition and overall well-being.

Successful candidates will be supervised by Dr Juliane J Honisch and will have the opportunity to work closely with national and international collaborators (clinical experts, engineers and psychologists). The student will have access to the latest 3D motion-tracking technology and medical body composition analysers, and will receive training on conducting kinematic analyses. We also encourage applications from individuals who have an interest in exploring virtual reality as a tool to analyse multi-person coordination.

Funding Notes

BSc (First Class or a minimum 2.1) or above in Psychology, Sports Science, Biology, Mathematics, Computer Science, Engineering or a related and relevant discipline.

Currently there is no studentship linked to this project. We consider self-funded students or applicants suitable for various competitive scholarships.

Multilingual Language Processing

Supervisor: Dr Ian Cunnings (i.cunnings@reading.ac.uk)

This project examines the similarities and differences between monolingual and bilingual sentence comprehension. It in particular focuses on native and non-native sentence processing. Achieving high proficiency in a non-native language can be particularly challenging in adulthood, and this project aims to examine the factors that influence successful non-native language comprehension.

Students on this project will run a series of behavioural studies, using tasks such as self-paced reading and/or eye-tracking during reading, but also potentially neuroscientific techniques such as EEG. Work on this project typically examines the acquisition and processing of non-

native English, but I am also open to supervising research into the acquisition and processing of other languages that an applicant may know.

Development of Language Processing

Supervisor: Dr Ian Cunnings (i.cunnings@reading.ac.uk)

How do children develop the language processing abilities to understand language in real-time during comprehension? This project examines this issue using the visual world eye-tracking paradigm, where participants are presented with a visual scene whilst listening to sentences. Students on this project will run a series of visual world eye-tracking studies examining language comprehension in children as compared to adults. I welcome applicants interested in examining the development of language processing in children from either the perspective of monolingual and/or bi-/multilingual language acquisition.

Memory encoding and retrieval during language processing

Supervisor: Dr Ian Cunnings (i.cunnings@reading.ac.uk)

Understanding language in real-time requires us to keep track of who did what to whom in a sentence or piece of discourse. This ability crucially depends on our ability to encode and retrieve information from memory during language processing. This project examines the factors that influence successful memory encoding and retrieval, and thus successful comprehension, during language processing. Students on this project will conduct a series of behavioural experiments, typically self-paced reading and/or eye-tracking during reading, but also potentially neuroscientific techniques such as EEG, that examine memory encoding and retrieval during sentence and discourse processing. Much of the work on this project examines these issues in English, but I also welcome students to work on other, understudied languages.

PhD projects in self-regulation, emotion, attention, and social cognition

Supervisor: Dr Julia Vogt (j.vogt@reading.ac.uk)

The Self-Regulation, Attention, and Emotion Lab examines various topics at the intersection of self-regulation, emotion, attention, and (social) cognition research. We aim to understand how people can achieve their many goals, solve self-control conflicts, and regulate emotions. We currently investigate health-related goals (healthy diet, exercising), prosocial motivations, and emotion-related goals such as coping with negative emotions. Much of our work is based on social-psychological and cognitive models of self-regulation, but we apply our research to consumer, organisational, health, and clinical contexts. We combine a variety of measures such as surveys, behavioural measures, interviews, and basic cognitive tasks. A focus in the lab is on how various goals and emotions impact people's attention to and perception of their environment. Specifically, we study:

(i) The effects of various emotions (e.g., guilt, fear, anger, disgust) on attention, cognition, motivation, and behaviour: We aim to understand what emotions motivate people to do and how emotions shape basic attentional and cognitive processes, and behaviour. Examples include guilt and prosocial behaviour or disgust and cleansing. For future projects, we would also be interested in studying courage and shame.

(ii) Regulation of negative and positive emotions: We apply a motivational perspective in order to understand regulation and coping with negative emotions and the pursuit of positive emotions and happiness. We investigate what motivates people to regulate emotions (or not). We study how attention or the pursuit of emotion-unrelated goals and motivations support or hinder such emotion regulation goals.

(iii) Perception of obstacles and means in goal pursuit and self-control: We study how people perceive and attend to stimuli that could help or hinder achievement of their goals. We test whether the currently active goal tunes attention towards means to achieve the goal but causes blindness to everything else. For instance, do dieters become blind towards unhealthy food? We also investigate when and why people have problems to perceive what helps and hinders achievement of their goals and successful self-control. We currently examine the role of attention and perception in self-control, prosocial behaviour, and intergroup conflict.

The effects of bi/multilingualism on cognition and the brain

Supervisor: Dr Christos Pliatsikas (c.pliatsikas@reading.ac.uk)

Increasing evidence suggests that speaking two or more languages has particular effects on the brain: First, it appears to change its function, structure and connectivity (Pliatsikas, 2020; Pliatsikas and Luk, 2016), and second, it appears to enhance the cognitive abilities of bi-/multilinguals, as well as to preserve them in older age, creating what has been dubbed a "cognitive reserve" in elderly bilinguals (Bialystok, Craik, & Luk, 2012). The proposed research aims to build on the existing literature by using behavioural and neuroimaging methods to investigate questions such as: how do these behavioural and structural effects develop over time, and with increased bilingual experience? Are factors such as proficiency and immersion in bilingual environments critical? What are the effects in situations such as bimodal bilingualism (where individuals use a sign and a spoken language) and bidialectalism/diglossia (where individuals speak two variants of the same language?). For more details, check the relevant lab page (<https://christoslab.wordpress.com/>)

Funding Notes

BSc (first class or 2.1) in Psychology, Cognitive Neuroscience, Neurolinguistics, or a related discipline

Music-assisted programmes: developing communication in autism spectrum disorder through music making

Supervisor: Dr Fang Liu

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition characterized by atypical social communication and interaction, and repetitive and restricted behaviours, activities and interests, affecting around 1% of the general population worldwide. It is estimated that about 30% of children with ASD do not develop functional speech, and remain non-verbal or minimally verbal even after years of speech, language and educational interventions. Although a wide range of programmes have been developed in order to facilitate language development in ASD, none have been effective in eliciting functional speech in ASD children.

Supported by an ERC proof of concept grant (MAP, 838787), we are currently running a randomised control trial (<https://research.reading.ac.uk/caasd-project/map-project/>) to examine whether music-assisted programmes would increase spoken language ability in 24-60-month-old autistic children with no or few words, in comparison with a treatment-as-usual group. Outcome measures include learning of 36 target words, language functioning, as well as social communication.

In this PhD project, the student will conduct a systematic review and meta-analysis on language/music interventions in autism, process and analyse the data collected from the trial, and write up a thesis on the MAP intervention. A qualitative interview will also be conducted with parents, who will share their experiences and provide feedback to the trial.

Funding Notes



Candidates should have a first or strong 2.1 degree in psychology or neuroscience and a distinction or high Merit in a relevant Masters qualification would be advantageous. The candidate should have a demonstrable interest in the topic and strong written and oral communication skills.

Interactive shared book reading with young children with Down Syndrome: working with parents to improve parent-child interaction and child language and communication outcomes

Supervisor: Dr Emma Pagnamenta (e.pagnamenta@reading.ac.uk), Professor Vesna Stojanovik (v.stojanovik@reading.ac.uk) & Colette Llyod (Down Syndrome Oxford)

Down syndrome is the most common genetic cause of learning disability. One of the biggest challenges for individuals with Down syndrome is language, a well-known predictor of psychosocial and academic outcomes. This PhD offers a unique opportunity to conduct a collaborative project that will have a direct impact on parents and preschool children with Down syndrome by:

- analysing the linguistic input and interaction during shared book reading
- co-designing an interactive shared book reading intervention and training package for parents
- conducting a small-scale feasibility study

This project is in collaboration with Down Syndrome Oxford - a large charity supporting over 150 families in Oxfordshire, providing speech and language intervention and training to families and schools and raising awareness of issues related to the care of people with Down syndrome.

The successful candidate will join a thriving postgraduate research community of more than 70 PhD students who benefit from excellent support and resources from the School of Psychology and Clinical Language Sciences and the University Graduate School. A comprehensive package of training will be provided by the supervisors, University of Reading and Down Syndrome Oxford.

Funding Notes

We are seeking a high calibre Speech and Language Therapy, Linguistics or Psychology graduate with excellent communication skills, experience of working with young children and enthusiastic about working with parents.

Emotion regulation in body and brain

Supervisor: Professor Carien van Reekum (c.vanreekum@reading.ac.uk)

Individuals vary greatly in how well they can regulate their emotions, and difficulties in emotion regulation have been linked to resilience and emotional disorders. In my lab, emotion regulation is broadly defined, and encompasses the study of reappraisal, threat extinction and temporal aspects of emotional responding, including emotional recovery, as well as flexibility in emotion regulation.

Questions that can be asked include: What is the neural overlap between threat extinction and reappraisal of threat? What are the different psychological and neural processes that allow some individuals to respond adaptively while others fail to do so? What characterises individuals who have trouble with threat extinction or emotion regulation? Can we identify individuals who are more resilient based on temporal aspects of emotional responding or flexibility in emotion regulation? Can we overcome any issues with emotion regulation with training or with biofeedback? Are bodily awareness and emotion regulatory ability associated?

Does cognitive capacity play a role? Does emotion regulatory ability decline with advancing age – what is the “tipping point”?

A PhD project focusing on aspects under the "emotion regulation" umbrella as defined above can use a mixture of psychophysiology (i.e. heart rate, skin conductance, muscle tension) and/or brain imaging (fMRI or EEG). The specific topic and population studied will be further defined based on mutual interest, expertise and the Ph.D. candidate's research experience to date. Please note, given the biological psychology/neuroscience focus of research in my lab, prior knowledge of, or experience with, psychophysiological or neuroscientific methods, and a bit of programming experience will definitely be beneficial.

Mental health and cognition in the context of physical ill health: targeting anxiety and depression in long-term neurological conditions

Supervisor: Dr Aileen Ho (a.k.ho@reading.ac.uk)

The concept of human well-being is a fundamental aspect of our existence and is often particularly vulnerable upon diagnosis and/or progression of long-term neurological conditions for which there is no cure, such as Parkinson's, Alzheimer's and Huntington's disease. As these conditions involve, insidious cognitive, motor and psychopathological deterioration tends to occur, and the adjustment and coping process can be additionally complex and challenging, affecting mental health and well-being. Projects in this specific area of interface between neuropsychology, clinical psychology and health psychology could be focused on 1) patients and also 2) family carers.

Possible areas of investigation include: Adjustment and coping processes of patients at various points of the disease trajectory using qualitative and quantitative measures, mindfulness and various cognitive behavioural interventions to ameliorate maladaptive adjustment and coping, other approaches such as positive psychology, social interaction, ecopsychology etc to build resilience to promote mental well-being and flourishing in family carers as well as patients/ themselves, Experimental cognitive training and rehabilitation to improve patient functioning, Psychological, cognitive, motor or a combination of these in real-world interventions on symptoms, disease progression, health status or health-related quality of life and subjective well-being. The use of technology and development of apps to facilitate all of the above is also of interest, as is the use of brain imaging to examine the neurophysiological effect of interventions. Potential candidates are invited to discuss their interest in relation to this topic in order to tailor projects to suit individual backgrounds, interests and skills.

Parallel programming and action control

Supervisor: Dr Eugene McSorley (e.mcsorley@reading.ac.uk)

My lab is interested how we are able to translate the processing of an ever changing visual world into the effective control of our actions (in this case our eye movements). As we move around the world and it moves around us how do we deal with these changes when it comes to acting upon things within it. Exactly what visual information do we use as we gaze around our environment? This project would consist of a series of experimental studies in which the visual environment is manipulated in order to examine the effect on our gaze patterns.

The relationship between perceiving and creating art

Supervisor: Dr Eugene McSorley (e.mcsorley@reading.ac.uk)

It has been suggested that the experience of art by a perceiver mirrors the process involved in the creation of art by the artist. This PhD project will empirically test current theories of the



impact of artists' decisions and actions on the perceivers aesthetic experience bringing together a range of novel physiological and behavioural techniques. The studies will not only allow us to test these theories but will afford a better understanding of the moment-to-moment development of the aesthetic experience.

Funding Notes

Competitive funding opportunities are available across a number of competitions both within the School, across the University and on a National level. Please contact me to explore these further. Self-funding students should feel free contact me directly to discuss this or other project ideas