



Teacher-Researcher Projects

ALP and Durham University



**Dr Bruce
Rawlings**

Biography

Bruce is an Assistant Professor in developmental, comparative and cross-cultural psychology, and has published work on children's creativity and innovation, how the society we grow up in impacts these skills, and how children compare to other animals.

Project

I have multiple ongoing projects investigating the impact of formal education (schools, school environments, classroom activities, teacher perceptions, academic achievement etc) and cognitive skills on creativity/innovation in children, and whether we can harness these skills at school. Age range 4-11 years. Data collection ongoing and will be so for the next couple of years. For one grant, we have some small funds that can be used for school-facing engagement.



**Dr Sheina
Lew-Levy**

Biography

Using methods from anthropology and psychology, I primarily conduct research in hunter-gatherer societies to understand the cultural diversity in, and evolution of, social learning in childhood. My research has shown that hunter-gatherer children learn, innovate, and feed themselves autonomously, and that such activities help them overcome ecological risks and challenges. I'm now interested in understanding peer learning more broadly, as well as how it can be incorporated into formal education.

Project

We (Bruce, me, others at different institutions) are on the tail end of data collection for a project on peer imitation throughout development (4-17 years) and across cultures. We have a very small budget to share our results with teachers, and I'd also be interested in working with teachers on designing something on peer learning in the classroom.

Biographies



**Prof Lynda
Boothroyd**

Both Lynda and Liz have extensive experience designing and running body image studies with children and adolescents across a wide age range. **Lynda Boothroyd** is a Professor of Cross-cultural Psychology who has published research on interpersonal attraction, appearance ideals, gender, and body image from developmental, experimental and evolutionary perspectives. She has previously documented the impacts of increased television access on beauty ideals in rural Nicaragua is currently principal investigator of 'BIRES' a major 6-country project on body image education in low- and middle-income countries. **Liz Evans** is Associate Professor of Behavioural Science. She has published research on body image in children and large-scale trials of weight-loss maintenance and healthy eating interventions in adults and understanding of child-weight in parents. She is a co-investigator on BIRES and is currently investigating the way autistic people understand their relationships to and and experience with eating.

Project



**Dr Elizabeth
Evans**

We are running research projects assessing the benefits of body positivity and anti-perfectionism interventions in schools. In the immediate future (late AY 2024-25 and AY2025-26) we will be running 'The Body Project' and a perfectionism intervention with sixth form and university students; these interventions have both been shown to be beneficial and in the current research we are investigating whether interventions which improve body image can reduce perfectionism and vice versa, so that schools and universities can best direct their efforts in intervention activities. In the longer term (later in AY2025-26 onwards) we will also be hoping to assess the benefits of a positive body image intervention developed for 13– to 15-year-olds in UK schools. The intervention is currently undergoing assessment abroad and is designed to be suitable for diverse adolescent samples.



**Dr Haemy
Masson**

Biography

I earned a Ph.D. in Brain Imaging Engineering in 2016 at Korea University and worked as a postdoctoral fellow at KU Leuven (Belgium) and Johns Hopkins University (USA) before joining Durham University as an Assistant Professor. I study how the brain processes social and emotional information, with a focus on mental health and neurodiversity. I use naturalistic neuroimaging techniques (fMRI and EEG) and computational modelling (deep learning and natural language processing) in my research. My specific area of interest is investigating the social touch perception and experience of autistic adults and those with depression and anxiety.

Project

My research interests focus on how touch is used as a tool for social and emotional communication. I would like to conduct an experiment to explore how children and young people perceive touch from others across different levels of social relationships, such as parents, close friends, and strangers. I will use a body painting task using a tablet or pen/paper where participants can paint areas of the body based on their judgments about touch (e.g., using red to indicate appropriate touch and blue for inappropriate touch). If possible, I would like to collect data on the autism scale using a short questionnaire, as it is known that autistic adults experience touch differently, and there are not enough studies looking at children and young people. This is not urgent, but it would be nice if it could happen in Y 2026/2027. Age range flexible.



**Dr Paddy
Ross**

Biography

My main research focus is understanding how children perceive social signals. Primarily I'm interested in exploring the development of emotion recognition from the body, hands and voice using behavioural experiments, fMRI and point-light displays. Away from developmental work I'm part of an interdisciplinary team working with the Shared Services Forum UK on the 'Digital Voice' project, investigating how the rise of communication technologies during the Covid-19 pandemic has impacted on employee's voice and well-being. I'm also a co-founder of the Wearable Ideologies (WE-ID) project, an international interdisciplinary research network exploring the ideologies of language on worn objects.

Project

I am running several studies looking at auditory dominance in children. This has to date been focussed on Primary School children, but expanding this to look at secondary school as well would be very useful. These are relatively short emotion recognition experiments, and one that might be of particular interest to teachers is how the aural environment affects children's perceptions of the visual. I'd be very interested in working with teachers on a project in which perception of work can be affected by the aural environment the children are exposed to.



**Dr Trevor
James**

Biography

Trevor is a Behavioural Scientist and first-generation scholar in the Psychology Department at Durham University. He has a podcast on EDI in Higher Education called Equality on the Mind and sits on the BPS EDI Board and the Durham Psychology EDI Committee. As an ethnic minority group member, with parents from the Windrush generation, Trevor has a strong interest in Equality, Diversity, and Inclusivity. He leads the mentoring strand for Pro: NE which is a £2.5m Office for Students funded project that improves access and participation for racially minoritized students across 5 Northeast partner universities. In his spare time, he plays around with Chat GPT and is leading a project exploring how generative AI can benefit neurodiverse students.

Project

The British Psychological Society (BPS) have piloted a lesson plan with a few schools on how psychological IQ testing affected the Windrush generations (see attached). This was developed in conjunction with the British Educational Research Association (BERA). I'm very interested to work with teachers to do any/some of the following: (i) deliver the lesson plan to a wider range of students; (ii) evaluate the lesson with students and staff; (iii) develop additional lesson plans, e.g., different social groups, religions, class, etc; (iv) develop a new intervention to promote collective pride and solidarity in young people; (v) develop a new intervention to inspire class and ethnic minority to pursue research careers. We don't have a specific timeline, but would like to apply to funding bodies if possible.



**Prof Zanna
Clay**

Biography

Zanna Clay is a Professor of developmental and comparative psychology at Durham University, where she leads the Comparative Cognition and Cross-Cultural Development Lab. Zanna does behavioural research with young children across cultures, as well as our closest primate cousins, the great apes, in order to investigate the evolutionary and developmental roots of empathy, social cognition and communication. She is currently investigating how empathy develops across cultures in the UK and Uganda and is broadly interested in the development of emotions and empathy.

Project

I am interested in running a study examining the relationship between children's cooperation, empathy and emotion expressions. This builds on previous work in which we have looked at the role that communication plays in children's cooperation and empathy, including across cultures. It would involve several short and fun tasks with children either individually or in pairs. Teachers and parents might enjoy learning more about how children's empathy develops and what can foster its growth in early childhood. This study could be done at different age ranges from 4-11.



**Prof Dorothy
Cowie**

Biography

I investigate how children and adults use sensory information to ground the sense of bodily self, and to guide movement. My current projects examine plasticity in the developing sensorimotor system.

I lead an ESRC-funded grant (2022-25), in collaboration with Profs Gillies & Pan at Goldsmiths. We use combined motion capture and virtual reality to study how children can accept virtual bodies which are different from their own. Together with Prof Tamar Makin, at Cambridge, I examine how children with limb differences learn to interact with their environments.

Project

I am running studies on (i) children's sensory and motor skills (ii) children's use of Virtual Reality, including as a learning tool. These studies typically involve short VR or desktop studies where the child moves or reaches in a space; we may e.g. record movements; ask them to control a virtual avatar; ask them to learn history or another topic in a short VR experience. These studies are funded by the ESRC.



**Dr Anna
Matejko**

Biography

My research interests are in the development of children's numerical and mathematical skills, and the relationship between maths and literacy. I have used both behavioural (paper-and-pencil or computer tasks) in my research, as well as neuroimaging (MRI), to understand the development of maths skills in typical and neurodivergent learners.

Project

My current research focuses on two main questions:

1) How do language skills support math learning? Certain skills that are important for reading, like knowing the sounds that make up words, might also help with math. We're studying how these kinds of language skills are related to how well children do on math problems and how they figure out the answers to these problems.

2) Why do reading and math difficulties co-occur? Learning difficulties in reading (dyslexia) and math (dyscalculia) tend to occur together more frequently than we would expect by chance. Surprisingly, around 50% of children who struggle with reading also face challenges in math. We're exploring the cognitive and neural factors that might be responsible for co-occurring difficulties in reading and math. By understanding why this happens, we can find ways to support children who have difficulties in both subjects.

I would be interested in collaborating on these topics with a focus on children between the ages of 6-12. However, I'm very open to discussing other project ideas related to maths and literacy development.



**Dr Steven
Poulter**

Biography

My research has focused on learning and memory. Specifically, how is the world out there represented in the brain. My focus has been on a structure of the brain important for memory called the hippocampus. It was in this structure that I discovered a new type of brain cell, the *Vector Trace cell*. These cells form part of a network important for both navigation and making memories. I am now using *Vector Trace cells* as a test bed for new drugs and for designing novel methods to enhance memory both in healthy ageing and disease.

Project

A memory journey in virtual reality

A good teacher should be able to impose meaning and structure to material that would otherwise be meaningless. There are several ways to assign structure, one of which is the method of loci: a technique of committing items to locations on a journey. 'I remember the park bench as I walked past the oak tree', 'the phone was on the piano stool as I walked through the games room'. As far back as the 6th century BCE there are records of the Greeks using imaginary journeys as a tool to remember information. Many modern-day memory champions use some version of a 'memory palace'. Neuroscience work, by our group and others, has also shown that the brain networks serving memory are the same as those mapping space and items during navigation. Thus, it makes sense to explore if the method of loci leads to better understanding/learning of a topic among students. The project will involve the use of virtual reality goggles as students navigate a virtual journey while learning curriculum content.