**Psychology Academic Associate PhD studentships 2023**

**Project Summaries**

Title: The relation between time beliefs and time biases

Contact: Dr Ruth Lee, r.lee@yorksj.ac.uk

Project Summary: **Adults and school-aged children seem to have ‘time biases’: they value the future over the past (for instance, preferring pain to lie in the past and pleasure in the future). This may be because the past seems ‘over and done with’, and people’s affect is more aroused by future events that are not yet fixed. However, recent evidence suggests variability in both these phenomena: some people may not think of the past as fixed and the future as open, and time biases are influenced by amount/duration of pain or pleasure and by experiential memories of events. Using experimental and survey methods, this PhD offers an opportunity to investigate the relation between adults’ and children’s beliefs about time and their time biases, and to examine potential mediators such as individual differences (e.g., mental health and psychological wellbeing), development across childhood, prospective cognition, memory, and identity.**

Title: How do children and adults learn a new language? Contributions of explicit and implicit learning mechanisms.

Contact: Dr Jelena Mirković, j.mirkovic@yorksj.ac.uk

Project Summary: Although language is one of the most complex skills humans have to master, children are able to learn it both quickly and effortlessly. Perhaps surprisingly, adults find learning new languages much harder despite being more advanced in many other skills. The explicit awareness of language regularities that adults often have can sometimes help their learning (e.g. Mirkovic et al., 2021, PsyArXiv), but it can also hinder it (e.g., Smalle et al, 2022, PNAS). In this project we will examine how children and adults learn new languages using artificial language learning experiments. We will explore the contribution of implicit and explicit mechanisms as learning unfolds over time and over development. You will be trained to use a variety of behavioural and neuroscientific methods (e.g., eye-tracking, EEG) to examine these questions. Understanding the mechanisms of language learning in typical development will provide insights into why some children struggle with language and communication, and this will help inform educational interventions. You will join a vibrant cross-institutional research community that examines learning and memory mechanisms in adults and children as they apply to language learning.

Title: Sexual violence, bystanders, and the impact of intervening

Contact: Dr Melanie Dawn Douglass, m.douglass@yorksj.ac.uk

Project Summary: Following the #metoo movement, there has been growing awareness of sexual harm, particularly on university campuses. Institutions, including York St John University as part of the All About Respect initiative, have rolled out bystander training to reduce rates of sexual harm on campus. Bystander training has been successful in increasing the likelihood of intervention (Fenton et al. 2016), thereby reducing rates of sexual harm. However, the impact of intervening is not well understood. Therefore, research needs to explore the effect of bystander training from a participant perspective (e.g., feeling shame for previous failure to intervene, bystander wellbeing). Employing a socio-ecological framework, this PhD will examine the outcomes of being a bystander and/or undertaking bystander training from the bystander perspective. The proposed research will employ both experimental and survey research designs to explore factors that predict positive and negative outcomes for bystanders. Candidates should have experience in quantitative methodologies and analyses.

Title: Factors influencing children's social and exploratory learning

Contact: Dr Emma Tecwyn, e.tecwyn@yorksj.ac.uk

Project Summary: When faced with novel problems to solve, children might choose to copy what they see others do (social learning), or they might explore their own solutions (exploratory learning). Across early childhood, the tendency to faithfully copy others (‘overimitation’) increases, and broad exploration decreases. To date there has been little investigation of the cognitive mechanisms underpinning age-related changes in these behaviours, or how contextual factors may impact their occurrence. This project will use behavioural studies with young children to examine (a) the cognitive underpinnings (e.g., executive functions, theory of mind, sequence cognition) of social and exploratory learning, and/or (b) the impact of contextual factors (e.g., formal education, learning environment, task affordances) on these behaviours. Data from this project will contribute to an evidence-based picture of the development of children’s learning processes and factors influencing them. Candidates should have experience of quantitative research in developmental/cognitive psychology. Research experience with children is desirable.

Title: How important is activation of imagery during single word processing?

Contact: Dr Nicola Savill, n.savill@yorksj.ac.uk

Project Summary: How representations of meaning (semantic representations) and sound (phonological/lexical representations) are coded in the brain and interact – what is activated and when -- are fundamental overarching questions related to understanding how we process language. At a single word level, semantic influences are observable even in tasks where meaning is irrelevant (e.g. repeating back or reading words aloud) and effects may vary systematically between individuals. Imageability (normed-based ratings of how visually evocative a word is) is often used to assess these semantic effects; however it’s unclear how much imagery-based properties capture language-based semantic activation. This PhD project will be shaped by the successful candidate but, broadly, will explore the role of imagery in processing semantic aspects of words and help clarify how representative properties like imageability are in capturing semantic access during language-based tasks (e.g., when disrupting/controlling imagery; in aphantasia). Electroencephalography (EEG) and/or pupillometry measures could help characterise online semantic activity.

Title: Exploring body image and disordered eating in the disabled community.

Contact: Dr Ruth Knight, r.knight1@yorksj.ac.uk

Project Summary: Body dissatisfaction and disordered eating are common experiences, which can have a lasting impact on an individual’s life and wellbeing. Our understanding of what eating disorders look like have largely been based on a specific kind of person; namely young, slim, heterosexual, cisgender, able-bodied white women. Gradually research is beginning to address the experiences of those who fall outside this group, however research into disordered eating in the disabled community is missing. This project will explore the impact of disability on body image and body satisfaction, and how this relates to disordered eating experiences. We also aim to validate a measure that is useful for this population and accurately captures the kinds of symptoms that disabled people experience. Candidates should have experience with both quantitative and qualitative methods, and we are especially interested in proposals that centre co-production in their approach. Those with lived experience are also encouraged to apply.

Title: Researching youth climate activism

Contact: Dr Maria Fernandes-Jesus, m.fernandesjesus@yorksj.ac.uk

Project Summary: Climate change is having visible effects on many communities. Despite being at the frontline of the climate crisis, literature has overlooked the voices of young people, particularly from Black, Asian and other minoritised ethnic backgrounds. This project will address this gap by focusing on the intersections between race, youth and climate activism in the UK and seeks to set the agenda for understanding climate activism among racially minoritised youth. Building on existing research in the field of youth climate activism and collective action, and political imagination, this project asks: How and in what conditions do racially minoritised youth engage in climate activism? What barriers do they face? How do they see their political roles in addressing climate change and building collective futures? To answer these questions, the project will undertake participatory research with young people. We welcome applicants with experience or interest in qualitative and youth-led research, climate justice, youth participation and collective action.

Title: Developing a new experimental protocol for investigating psychological flow

Contact: Brett Heasman b.heasman@yorksj.ac.uk

Project Summary: *Flow states* are heightened moments of concentration, motivation and enjoyment, leading to total absorption in the present moment, high performance, enhanced learning, and creativity. However, the study of flow states lack objective measures necessary for experimental investigation as existing data are mostly self-report. This PhD will seek to design and test a new experimental protocol for the study of psychological flow. It will examine the potential to triangulate self-report and behavioural data (e.g., eye-tracking attention, spatial awareness, temporal awareness) within a controlled environment. A reliable protocol will facilitate a range of future conceptual applications within the PhD and beyond, e.g., how people transition in and out of flow; the difference between individual and intersubjective flow; and how individual differences impacts flow experiences. Candidates should have an interest in flow states, experience in mixed-methods methodologies and analyses, an ability to work independently and with others, and a high standard of written English.