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Socio-emotional synchrony in social interactions: the impact of partner neurotype ESRC DTP Joint Studentship

University of Birmingham and University of Nottingham

The Midlands Graduate School is an accredited Economic and Social Research Council (ESRC) Doctoral Training Partnership (DTP). One of 14 such partnerships in the UK, the Midlands Graduate School is a collaboration between the University of Warwick, Aston University, University of Birmingham, University of Leicester, Loughborough University and the University of Nottingham.

We are now inviting applications for an ESRC Doctoral Joint Studentship between the **University of Birmingham** (where the student will be registered) and the **University of Nottingham** to commence in October 2023.

Being a successful navigator of the social world relies on forming and maintaining social relationships; from building lasting friendships to being a skilled mediator in the boardroom. Improved interpersonal rapport between individuals leads to increased interest in future interaction (Crompton, Sharp *et al.*, 2020), and greater emotional resonance (i.e., being emotionally ‘in sync’) with others improves relationship strength (Brown *et al.*, 2022) and promotes prosocial behaviour (West *et al.*, 2021). Additionally, one’s body movement when expressing themselves and whether this is similar to their interaction partner has an important role in social communication (Cook, 2016; Sowden *et al.*, 2021).

Recently, the impact of neurodiversity on such socio-emotional experiences has gained interest. Despite attempts made by autistic individuals to camouflage their autistic traits when interacting with non-autistic peers, cross-neurotype interpersonal interactions (between autistic and non-autistic individuals) are more challenging than same-neurotype interactions (autistic/autistic or non-autistic/non-autistic pairs). This includes poorer effectiveness of information transfer (Crompton, Ropar, *et al.*, 2020), social understanding (Crompton, Hallett, *et al.*, 2020) and interpersonal rapport (Crompton, Sharp *et al.*, 2020).

The ‘*double empathy problem*’, a concept proposed by Milton (2012), describes such bi-directional social understanding difficulties. This research project seeks an explanation of *why* same-neurotype interactions are more effective. Specifically, this PhD project will identify factors contributing to better/worse rapport by designing and testing concrete experimental measures of socio-emotional synchrony between individuals.

The successful candidate will be part of a vibrant lab of PhD students and postdoctoral researchers within the Centre for Developmental Sciences (School of Psychology) at the University of Birmingham, under the supervision of [Dr Sophie Sowden](#) and [Professor Jennifer Cook](#), with co-

supervision provided by [Professor Danielle Ropar](#) (University of Nottingham). The student will receive expert tuition that bridges the gap between quantitative behavioural analyses (Sowden and Cook), measuring subjective experiences in dyadic interactions (Ropar) and engaging in participatory, open science practices.

Application Process

To be considered for this PhD, please complete the Joint Studentship application form [available online here](#). Please upload an anonymised CV and cover letter as part of the online application process. Shortlisted applicants will also be required to provide transcripts and two references.

Application deadline: Sunday 26th February (23:59)

Estimated interview date: Monday 13th March 2023 (via Zoom)

Midlands Graduate School ESRC DTP

Our ESRC studentships cover fees at the home rate, a maintenance stipend, and extensive support for research training, as well as research activity support grants. Support is available to both home and international applicants. For further details, visit: www.mgsdtp.ac.uk/studentships/eligibility/.

Informal enquiries about the research or School of Psychology prior to application can be directed to **Dr Sophie Sowden**: s.l.sowden@bham.ac.uk