

**Disentangling affective and perceptual processing in emotion recognition: Applications to health and affective computing. (Ref. SoSS-2020-014)**

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This interdisciplinary project between Psychology and Computer Science seeks to understand the relative contribution of perceptual (visual information) and affective processing in emotion recognition of faces by using stimulus sets tailored to participants. This project will advance both theory, such as the *double empathy problem* in people with autism and the *facial feedback hypothesis*, as well as support the development of personalised health behaviour interventions. In addition to being important for effective social communication, facial emotion recognition is disrupted in a number of conditions (*e.g.*, depression, autism and Parkinson's) and is increasingly important in the development of artificially intelligent systems (affective computing) including social robots (*e.g.*, Furhat robot). Behavioural performance will be measured for different facial expressions across a range of experimental paradigms. Recording of participants' eye movements as well as quantification and classification of production of facial expressions with participants from different populations (*e.g.*, autistic traits) will also take place.

**It is desirable, but not essential, for applicants for this project to have the ability to program experiments in Matlab, PsychoPy or equivalent; use and analyse eye tracking equipment (*e.g.*, Tobii) and data; and to be familiar with programming/coding.**

*For informal enquiries, please contact Prof. Thusha Rajendran ([t.rajendran@hw.ac.uk](mailto:t.rajendran@hw.ac.uk)). Please also see this [paper](#) which is useful for further details about the area of research.*

When submitting your application for this project area, please select the option 'Psychology, PhD' from the drop-down list on the online application system.