

Neural correlates of self-recognition in 6- to 8- month-old infants

Silvia Rigato, Eleanor Richardson, Maria Laura Filippetti*

Centre for Brain Science, Department of Psychology, University of Essex

*Presenting author

Adult research has showed that multisensory information and knowledge about the body constrain body representations. How these mechanisms interact to construct and maintain a sense of bodily self throughout development is still a matter of debate. In this talk I will present a series of infant studies examining the role of visual-tactile multisensory information and facial appearance in the development of self-face representation. In particular, I will focus on a new ongoing registered report that aims to disentangle the role of familiarity and own-face specificity for self-recognition by examining ERP responses at both N290 and P400 (face-selective components) as well as Nc (familiarity) in 6-to-8-month-old infants. Pilot data (N = 9) show that the face-sensitive P400 component is enhanced by self-face images compared to images of a peer's face. The study has received in-principle acceptance (IPA) as a registered report by the journal *Child Development* and we aim to present the full results at SIPF 2022.