

Electrophysiological evidence for a deficit in distinguishing facial expressions of contempt and disgust in social anxiety disorder

Kendra Gimhani Kandana Arachchige¹, Wivine Blekic¹, Laurent Lefebvre¹ & Mandy Rossignol¹

¹Service de Psychologie Cognitive et Neuropsychologie

Université de Mons, Belgique

Social anxiety disorder (SAD) is associated with an altered processing of social threat, notably emotional facial expressions (EFE) signaling disapproval or hostility. Recent results suggest that disgust may have a negative value for individuals with SAD. Originally a food-related expression it may also be interpreted as a form of social disapproval, close to the concept of contempt. The aim of this study was to investigate whether the ability to distinguish disgust and contempt EFE is disturbed in SAD. To this aim, 15 individuals (mean age $20,84 \pm 1,52$) with high social anxiety (HAS) and 15 with low SAD score (LSA) performed an oddball paradigm with EFE displaying sadness, disgust or contempt. Behavioral results showed a main effect of anxiety, HAS subjects producing more correct responses suggesting an enhanced ability to discriminate EFE. Regarding ERPs, we evidenced enlarged amplitudes of P1 and N170 in SAD. Finally, results showed an N2b-P3a complex negatively modulated by social anxiety suggesting lower detection of EFE deviance in HAS subjects. In conclusion, SAD isn't only characterized by a distinction between disgust and contempt, while control subjects discriminate both EFEs.