Perception of faces of mothers with posttraumatic stress disorder (PTSD) related to interpersonal violence

We received a seed-grant in 2014 from the Geneva/Princeton collaborative research grant, which allowed us to have a fruitful collaboration, using avatars created by Prof. Alexander Todorov and colleagues at Princeton, and to use them in a face evaluation task with the clinical population of the Geneva Early Childhood Stress Project (GECS-Pro), Dr. Daniel Schechter, principal investigator. The GECS-Pro involved mothers with and without posttraumatic stress disorder (PTSD) related to interpersonal violence (IPV). In this pilot study, 5 mothers from the GECS-Pro, evaluated 350 avatars varying on the threat and dominance dimensions. We then compared mothers’ responses during these tasks to existing variables previously collected during the GECS-Pro. We obtained promising results showing a general under-estimation of dominance and threat among the avatars by mothers with IPV-PTSD as compared to controls. We also found a significant relationship between the evaluation of the two dimensions, and the scores reported by the mothers at the Clinician Administered PTSD Scale (CAPS), mainly on the hyperarousal scale (p-value between .010 and .042), but also at the CAPS total score (p-value between .002 and .031). Following from these promising preliminary results and rewarding collaboration, we are pleased to present this request for your consideration. This 3-years grant would allow us to conduct the same research on more participants, and to apply electroencephalography, in order to characterize better specific electrical patterns of activation on the dimensions of threat and dominance, in mothers with PTSD related to their exposure to interpersonal violence, and compare them to controls mothers.

Participants:

Dr Daniel Schechter  
University of Geneva - Department of Psychiatry, Faculty of Medicine  
Website

Prof Alexander Todorov  
Princeton University - Department of Psychology, Graduate School of Arts and Sciences  
Website

Ms Virginie Pointet  
University of Geneva - Department of Neuroscience, Faculty of Medicine  
Website