# Effects of maternal trauma and psychopathology on attentional biases to emotional stimuli among refugee mother-child dyads

Julia Michalek[1,*], Kristin Hadfield[2], Rana Dajani[3,4], Isabelle Mareschal[1]

[1]Department of Psychology, Queen Mary University of London
[2]School of Psychology, Trinity College Dublin
[3]Biology and Biotechnology Department, Hashemite University
[4]Jepson School of Leadership Studies, University of Richmond

**Summary** Early adversity can impact emotion processing and has been linked to increased risk of psychopathology. Socioemotional development in children can also be influenced by parental trauma and mental health. Here we aim to explore the relationship between war trauma, mental health, and attention biases to affective stimuli in a sample of Syrian refugee children and their mothers.

Keywords · refugee children · war trauma · emotion processing · attention bias · dot probe task

✉ Name: j.michalek@qmul.ac.uk

**Introduction** Refugee children are at a heightened risk for poorer mental health and emotional problems. This occurs both through direct pathways of war trauma exposure and continuing adversity, as well as through parents' own poorer mental health (Miller & Rasmussen, 2017). Disturbances in emotion processing, such as attentional biases towards negative stimuli, have been linked to early adversity, maternal mental health and childhood psychopathology (Owens et al., 2016, Pollak, 2012). Despite the impact of emotion processing abnormalities on children's psychosocial functioning and wellbeing, the association between maternal trauma, mental health and attention biases in refugee children has not yet been investigated.

**Aims** This study explores the impact of maternal war trauma exposure and psychopathology on attentional biases towards negative emotions in mothers and their children. We have the following two hypotheses: (a) that increased attention bias towards anger and sadness in children and mothers will be predicted by higher maternal trauma and psychopathology, and (b) that a mother and her child's attention biases will be positively correlated.

**Methods** We will test 350 pairs of Syrian refugee mothers and children (4-8 years old) living in Jordan. Attention bias will be assessed using a modified dot probe task with two types of emotional faces (anger, sad), each paired with a same-identity neutral face, randomised across 100 trials. A given trial is as follows: the face stimuli are presented for 500ms, followed immediately by a coin (probe) that randomly appears in the location of either an emotional (congruent trial) or neutral face (incongruent trial). Participants must indicate the position of the coin (left or right) as quickly and accurately as possible. Maternal trauma, depression, insecurity and distress will be assessed with self-reported questionnaires.

**Proposed Analysis/Predicted Results** Dot probe task reaction times (RT) for correct emotional trials will be used as indicators of attention bias towards anger and sadness in children and mothers. RT from congruent trials will be subtracted from incongruent trials to form a bias score – higher bias scores will indicate preferential attention towards emotional faces. We will conduct regression analyses to test if maternal trauma and mental health predict maternal and child attention biases, and a correlation analysis to assess how maternal and child attention biases are linked.

**Conclusions** These findings will improve our understanding of the effects of maternal exposure to war trauma on attentional biases to affective stimuli in refugee mothers and their children. In children, they can be linked to emotional wellbeing and could be targeted by interventions aimed at lessening the impact of adversity among war-affected populations.

**References**

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