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# Neural Correlates of Posttraumatic Stress Disorder Symptoms, Trauma Exposure, and Postmigration Stress in Response to Fear Faces in Resettled Refugees

By Belinda J. Liddell, Jessica Cheung, Tim Outhred, Pritha Das, Gin S. Malhi, Kim L. Felmingham, Angela Nickerson, Miriam Den, Mirjana Askovic, Mariano Coello, Jorge Aroche, Richard A. Bryant

## SUMMARY by Maic D'Agostino

This study sought to understand the direct effects of PTSD symptoms, cumulative trauma load from trauma exposure, and environmental stress from postmigration on the neural functioning of resettled refugees by investigating neural correlates on responses to fear and functional connectivity.

85 refugees resettled in Australia were able to complete the study, the majority of whom were male and listed country of origin as either Iran (40%), Iraq (16.5%), or Sri Lanka (7%), with the remaining 36.5% from various countries in Asia, the Middle East, Europe, and South America. Researchers gave assessments for trauma exposure, PTSD symptoms and severity, and stress from an array of postmigration issues. Then, participants' responses to fear faces and neutral faces while receiving an fMRI scan were analyzed.

The results suggested that the degree of trauma exposure and postmigration stress does correlate with specific neural activity and connectivity patterns when refugee participants viewed fear faces. Counter to past research, PTSD symptom severity did not correlate with greater dysregulation of fear neural networks. This was true either when PTSD symptoms were analyzed alone or controlled for trauma load and postmigration stress. The authors drew a connection between refugee trauma and childhood trauma, noting that childhood trauma, regardless of mental health diagnoses, has been demonstrated to affect brain structure and functions.

The researchers surmised that treatment and services for highly trauma-exposed refugee populations should consider the amount of exposure individuals have to traumatic events and the unique stressors they continue to experience after resettlement. However, with little knowledge of how trauma exposure and contextual stress affect other highly trauma-exposed populations, the authors noted that conclusions from the study cannot be made about refugee populations independent of these others. Participants also came from a number of different cultural backgrounds that could have affected neural responses; researchers suggested future studies attempt to draw from larger samples within subgroups.

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