

Minds Under Siege: Cognitive Signatures of Trauma and Stress in Refugee Children & Adolescents

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Armed conflict and its aftermath cause undeniable harm to the mental health and education of children, posing multiple ongoing threats to their survival and rights. The average length of displacement for a refugee today is over 25 years (UNHCR & UNESCO, 2016), meaning that millions of children will carry a “dual burden” of war traumas as well as daily displacement stressors through childhood and beyond. Yet the exact mechanisms through which refugee children’s experiences of different conflict-related adversities influence their mental health and education outcomes remain unclear.

The impacts of war and displacement on executive function (EF) — what we might call the cognitive signatures of minds under siege — are little known. Using an innovative neuropsychology tablet assessment to gauge executive functioning, we studied a gender-balanced sample of 12- to 18-year-old Syrian refugees ($n = 240$) and Jordanian non-refugees ($n = 210$) living in Jordan. We examined the relative contributions of poverty, trauma exposure, posttraumatic stress, and insecurity to variance in inhibitory control (IC) and working memory (WM). We observed associations between poverty and WM, suggesting that, even in populations exposed to substantial violence and fear, poverty is a specific pathway to WM deficit. We did not, however, find associations between EFs and exposures to trauma. Careful distinction between childhood adversities may illuminate which neurocognitive pathways matter for measures of cognitive function.