

¹Bibliography: Impact of Trauma on Child Development Literature Review

Below is a literature review library highlighting the impact of trauma on child development.

[Here](#) is a link to the Zotero library with references listed in this bibliography.

Topics Included:

1. General impact of trauma on child development
2. Impact of trauma on child development: refugee and asylum seeking populations
 - a. Impact on neurodevelopment
 - b. Impact on emotional health
 - c. Impact on health

General Impact of Trauma on Child Development

1. Garner, A. S., Forkey, H., & Szilagyi, M. (2015). Translating Developmental Science to Address Childhood Adversity. *Acad Pediatr*, 15(5), 493-502. doi:10.1016/j.acap.2015.05.010

- Review article detailing research in the areas of life course science, gene-environment interactions, and the biology of adversity.
- Life course science research review summarizes the effects of childhood experiences on adult outcomes, including the original and follow-up Adverse Childhood Events studies.
- Gene-environment interactions review details models of understanding the varying responses of children to adverse experiences, including genetic predisposition and susceptibility.
- The biology of adversity review details physiological responses to stress including on immune function, epigenetic mechanisms, and brain connectivity.

2. Nelson, C. A., & Carver, L. J. (1998). The effects of stress and trauma on brain and memory: a view from developmental cognitive neuroscience. *Dev Psychopathol*, 10(4), 793-809.

doi:10.1017/s0954579498001874

- Review of literature to demonstrate potential neurological mechanisms that explain the impact of stress on memory.
- Details the neurological basis of memory, existing studies on stress and the effects on the brain, and hypotheses on the effects of stress on memory.
- Includes references specific to 1) memory deficits in children exposed to exogenous glucocorticoid; 2) studies in infant monkeys of stressed mothers with delayed development and; 3) adult studies on PTSD from childhood abuse causing deficits in certain types of memory

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Impact of Trauma on Child Development: Refugee & Asylum Seeking Populations

Effects on neurodevelopment

1. Cohodes, E. M., Kribakaran, S., Odriozola, P., Bakirci, S., McCauley, S., Hodges, H. R., . . . Gee, D. G. (2021). Migration-related trauma and mental health among migrant children emigrating from Mexico and Central America to the United States: Effects on developmental neurobiology and implications for policy. *Dev Psychobiol*, 63(6), e22158. doi:10.1002/dev.22158

- Review article citing the psychological and behavioral effects of migration-related trauma on children, and hypothesized effects of migration-related trauma on neurodevelopment.
- Focuses on effects due to migration from Mexico and Central America.
- Reviews neurodevelopment by detailing effects of trauma on attachment relationships with caregivers, emotion regulation, and fear learning and extinction.
- Also presents policy implications for addressing the effects of migration-related trauma.

2. Graham, H. R., Minhas, R. S., & Paxton, G. (2016). Learning Problems in Children of Refugee Background: A Systematic Review. *Pediatrics*, 137(6). doi:10.1542/peds.2015-3994

- Systematic Review article detailing the school outcomes of refugee children; includes thirty-four studies from various countries.
- Studies showed similar educational outcomes between refugee children and their native-born peers.
- Studies cited mixed evidence for the impact of trauma on cognition, school outcomes, and behavioral and emotional health outcomes.
- Risk factors for the outcomes include many school-related factors such as bullying, low teacher expectations, poor teacher awareness of student linguistic heritage, and others. Protective factors included the converse of the above factors such as good teacher understanding of linguistic and cultural heritage, and family and parental support, demonstrating the potential for social contexts to modify the effects of trauma on school performance.

3. Kaplan, I., Stolk, Y., Valibhoy, M., Tucker, A., & Baker, J. (2016). Cognitive assessment of refugee children: Effects of trauma and new language acquisition. *Transcult Psychiatry*, 53(1), 81-109. doi:10.1177/1363461515612933

- Review article on the effect of traumatic aspects of the refugee experience on cognitive function, particularly examining the impact of the need for new language acquisition for refugee children.
- Details the psychological and cognitive effects of traumatic events in children; includes studies of refugee children that demonstrate increased depression and anxiety disorders.
- Summarizes studies in children demonstrating hypothalamic-pituitary-adrenal axis dysfunction due to Adverse Childhood Experiences as well as refugee-specific studies showing disrupted parental attachment.

- Cites studies that show the impact of disrupted family functioning on child development, and the impact of language skills and educational outcomes of children who are refugees..

4. Masten, A. S., & Narayan, A. J. (2012). Child development in the context of disaster, war, and terrorism: pathways of risk and resilience. *Annu Rev Psychol*, 63, 227-257.

doi:10.1146/annurev-psych-120710-100356

- Review article on 1) the effects of mass trauma such as natural disasters and war on children and youth 2) surveys current models of risk and resilience and; 3) highlights hypotheses of biological responses to stress.
- Studies show the protective effects of bolstering resilience through various interventions with resilience enhanced by support systems, self-efficacy, and hope and belief systems.
- Details age-group specific risk and protective factors for the impact of adverse experiences.

5. Minhas, R. S., Graham, H., Jegathesan, T., Huber, J., Young, E., & Barozzino, T. (2017). Supporting the developmental health of refugee children and youth. *Paediatr Child Health*, 22(2), 68-71.

doi:10.1093/pch/pxx003

- Reference article presenting a checklist and tool, Education, Migration, Parents and Family, Outlook, Words, Experience of Trauma and Resources (EMPOWER), to assess the developmental health of refugee children.
- Cites the impact of a history of trauma as a risk factor for poor educational achievement in refugee children.

Effects on emotional health

6. Emerson, S. D., Gagne Petteni, M., Guhn, M., Oberle, E., Georgiades, K., Milbrath, C., . . . Gadermann, A. M. (2022). Social context factors and refugee children's emotional health. *Soc Psychiatry Psychiatr Epidemiol*, 57(4), 829-841. doi:10.1007/s00127-021-02173-y

- Research article examining the impact of social contextual factors - school climate, supportive adults at school and at home, and peer belonging - on indicators of emotional health (life satisfaction, self-concept, optimism, and sadness). Surveyed 682 students in Grade 4 in British Columbia, Canada, with a refugee background.
- Supportive school climate, support from adults in school and at home, and peer belonging each were associated with higher emotional health indicators.

7. Gartland, M. G., Ijadi-Maghsoodi, R., Giri, M., Messmer, S., Peeler, K., Barkoudah, A., & Shah, S. (2020). Forensic Medical Evaluation of Children Seeking Asylum: A Guide for Pediatricians. *Pediatr Ann*, 49(5), e215-e221. doi:10.3928/19382359-20200421-01

- Review article detailing the process and background to consider when conducting forensic medical evaluations for asylum applications in children.

- Details manifestations of traumatic stress in children and adolescents. Younger children often display somatic complaints and behavioral changes such as aggression, restlessness, and under-reacting to situations. Adolescents often display self-harming and/or reckless behaviors..
- Cites a diminished capacity to “form, recall, and narrate memories” due to trauma in children.

8. Joshi, P. T., & Fayyad, J. A. (2015). Displaced Children: The Psychological Implications. *Child Adolesc Psychiatr Clin N Am*, 24(4), 715-730. doi:10.1016/j.chc.2015.06.003

- Review article detailing the emotional and psychological consequences of displacement on children.
- Cites studies on the impact of various exposures that are part of the displacement experience including disruption of education, loss of the traditional way of life, and living with distressed adults. Links these experiences to outcomes including cognition, memory, attention, and psychological factors such as depression, anxiety, and substance use.
- Details the mediating variables of the above associations including family support, child temperament, and attachment.

Effects on health

9. Kadir, A., Shenoda, S., & Goldhagen, J. (2019). Effects of armed conflict on child health and development: A systematic review. *PLoS One*, 14(1), e0210071. doi:10.1371/journal.pone.0210071

- Review article on the health effects of armed conflict on children and their development.
- Separates studies based on regions of conflict including Afghanistan and Iraq, Israel and Palestine, Syria, the DRC, and Former Yugoslavia.
- Cites data that demonstrate a net negative effect of conflict on child physical and mental health, examining outcomes such as infant feeding and birth weight, brain and neuroendocrine function, and caregiver attachment.

10. Kroening, A. L. H., & Dawson-Hahn, E. (2019). Health Considerations for Immigrant and Refugee Children. *Adv Pediatr*, 66, 87-110. doi:10.1016/j.yapd.2019.04.003

- Review article on the physical, developmental, and behavioral health effects experienced by immigrant and refugee children.
- Details the prevalence of mental health, physical health, and developmental disorders in immigrant and refugee children via the exposures of violence, female genital cutting, xenophobia, and war and conflict.

11. Solberg, M. A., & Peters, R. M. (2020). Adverse Childhood Experiences in Non-Westernized Nations: Implications for Immigrant and Refugee Health. *J Immigr Minor Health*, 22(1), 145-155. doi:10.1007/s10903-019-00953-y

- Review article that examines the impact of Adverse Childhood Experiences (ACEs) on physical health, risky health behaviors, and mental health in countries from which many refugees and immigrants to the US originate.
- Summarizes studies showing a higher prevalence of ACEs in these countries than in the populations studied in the original ACEs study (populations studied in the original ACEs study include those who are Western, predominantly white and have higher incomes).
- The increase in ACEs in lower income countries corresponded to an increased prevalence of negative outcomes in the domains listed above (physical health, risky health behaviors and mental health).

Other References

12. Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*, 14(4), 245-258. doi:10.1016/s0749-3797(98)00017-8

- Original study documenting the impact of Adverse Childhood Experiences on adult health outcomes.

13. Finkelhor, D., Shattuck, A., Turner, H., & Hamby, S. (2013). Improving the adverse childhood experiences study scale. *JAMA Pediatr*, 167(1), 70-75. doi:10.1001/jamapediatrics.2013.420

- Follow-up study updating the scale to measure Adverse Childhood Experiences that was developed after the original study in 1998.