

Research RoundUp

Q4 2021 Research highlights from the field of childhood trauma



Cutting edge research on trauma and childhood maltreatment.

The Research Round Up series helps to bridge the gap between academic researchers and busy professionals. This publication provides summaries of ten research studies from the field of trauma and childhood maltreatment published during the final quarter of 2021.

Each summary lists the size, age, ethnicity, and gender of the sample according to the terms given in the source literature. However, we recognise that there is not a clear consensus on how these terms are (or should be) presented in the literature. and that in some cases terminology and categorisation may cause unintended offense or harm. We are continuously discussing how to use language addressing race, ethnicity and gender when writing about research and are open to feedback to how this can be improved in our research communication and dissemination. Please send feedback on language or our approach to uktc@annafreud.org.

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Subjective and objective experiences of childhood maltreatment - implications for research and clinical practice

Recent studies suggest poor agreement between objective evidence of maltreatment (e.g., statutory agencies or court records) and subjective reports. Moreover, the latter has more strongly been linked with poor mental health. In this commentary, **Danese and Widom** (2021) explore the possible clinical and research implications of these novel findings. The authors highlight that future studies should examine (a) the extent to which cognitive processes linked to mental health difficulties influence how early traumatic experiences are recalled; (b) how the severity or duration of childhood maltreatment experiences, and the age at which they took place, may influence the subjective recollection of such events; and (c) if subjective accounts of childhood trauma can more accurately predict future mental health problems than objective

records. The authors also highlight that the strong relationships between the subjective experience of early adversity and mental health outcomes has implications for clinical practice. Focusing on how early adversity is recalled may help clinicians (a) develop a trusting therapeutic relationship, (b) identify beliefs related to the trauma and (c) shift unhelpful narratives and behaviours that may exacerbate distress. In sum, this commentary highlights that understanding the subjective experience of early adversity may have important implications both for clinical practice and research.

Danese, A., & Widom, C. S. (2021). The subjective experience of childhood maltreatment in psychopathology. *JAMAP*, 78(12), 1307–1308. https://doi.org/10.1001/jamapsychiatry.2021.2874



The reciprocal relationship between traumarelated distress and social relationships among young people in residential care

examined social functioning and post-traumatic stress disorder (PTSD) in a sample of young people receiving trauma-informed residential treatment in New England (USA) (n = 452, mean age = 15.7; 57% female; 18.5% Hispanic, 15.5% Black/African American, 14.8% Multiracial, 50.8% White). The researchers found that PTSD symptoms and social relationships mutually affect

each other over time. Improvements in social

functioning predicted future reductions in PTSD

symptoms, and, at the same time, improvements

In this study, Lord and colleagues (2021)

in PTSD symptoms predicted future reductions in social functioning problems. In sum, these findings highlight the importance of social relationships for young people experiencing trauma-related symptoms.

Lord, K. A., Suvak, M. K., & Hodgdon, H. B. (2021). Temporal relationships between PTSD symptoms and social functioning among adolescents in residential care. *Journal of Clinical Child and Adolescent Psychology*, 53, 1–12. Advance online publication. https://doi.org/10.1 080/15374416.2021.2007486



Can screening for early traumatic experiences help us identify individuals at increased risk of poor health?

In this study, Meehan and colleagues (2021) explored whether screening for childhood trauma can predict health outcomes at an individual level. The researchers analysed data from the Adverse Childhood Experience Study (n = 8,506, mean age = 56 years; 52.1% female; no information on ethnicity was reported). They confirmed the well-established link, at the group level, between adverse childhood experiences and an increased likelihood of developing poor mental and physical health. However, the authors found that screening for early adverse events failed to identify, at an individual level, those who presented with physical or mental health conditions. Most individuals with a low number of early adverse experiences had positive health outcomes, and only a small proportion of individuals with poor

health outcomes also experienced a high number of early traumatic experiences. This suggests that screening based on the number of early adverse experiences fails to accurately identify those individuals at heightened risk of poor health. The authors highlight that this can lead to the misallocation of resources (e.g., providing unnecessary interventions). In sum, screening for early adverse experiences did not allow the researcher to identify those most at risk of developing mental health problems.

Meehan, A. J., Baldwin, J. R., Lewis, S. J., MacLeod, J. G., & Danese, A. (2022). Poor individual risk classification from adverse childhood experiences screening. *American Journal of Preventive Medicine*, 62(3), 427–432. https://doi.org/10.1016/j.amepre.2021.08.008



Children and young people's evaluation of their rapport with clinicians predicts the outcome of trauma-focused treatment

The therapeutic alliance, i.e. the quality of the relationship between a service user and a clinician, is a significant predictor of treatment outcome. In this study, Ovenstad and colleagues (2021) explored four different perspectives on the therapeutic alliance: that of the young person/ service user, the parent, the therapist, and an external observer (who listened to the session's recordings). Sixty-five young people who were undergoing trauma-focused cognitive behavioural therapy in Norway (mean age = 15 years; 76.9% female; 82% with at least one Norwegianborn parent) and their therapists (n= 24; 91.7% female; no other demographic information was reported) took part in this study. Only young people's perceived alliance predicted a reduction in PTSD symptoms. Also, an overestimation of

the therapeutic alliance by therapists or parents (compared to young people's reports) was linked with poorer treatment outcomes. In sum, a good therapeutic relationship during traumafocused interventions predicted positive treatment outcomes only when rated by young people. An overestimation of the alliance by parents or clinicians predicted poor outcomes.

Ovenstad, K. S., Jensen, T. K., & Ormhaug, S. M. (2021). Four perspectives on traumatized youths' therapeutic alliance: Correspondence and outcome predictions. Psychotherapy Research: *Journal of the Society for Psychotherapy Research*, 1–13. Advance online publication. https://doi.org/10.1080/10503307.2021.2011983



Mental health trajectories of risk and resilience in looked-after children and young people

Young people who have been removed from their family due to exposure to childhood maltreatment tend to experience high rates of mental health difficulties. In this study, Hiller and colleagues (2022) explored changes in mental health symptoms among 672 young people (2-16 years, 51% male; 76% Caucasian, 6% Black, 10% mixed ethnicity and 8% another ethnicity) over their first three years in the UK out-of-home care system (i.e., foster, kinship or residential care). At baseline, half of the young people showed low levels of mental health problems. The other half experienced high levels of mental health symptoms. The authors found a high degree of symptom stability - approximately 70% of young people continued to show elevated symptoms

over time. According to the authors, this indicates that entry into the care system alone is insufficient to facilitate symptom reduction for those young people who present with mental health difficulties. In sum, the majority of looked after children and young people with elevated mental health symptoms do not tend to experience improvements over at least the first three years in care.

Hiller, R. M., Fraser, A., Denne, M., Bauer, A., & Halligan, S. L. (2022). The development of young peoples' internalising and externalising difficulties over the first three-years in the public care system. *Child Maltreatment*, 10775595211070765. Advance online publication. https://doi.org/10.1177/10775595211070765



Brain changes in the memory system after exposure to early adversity are not fixed

In this study, **Puetz and colleagues (2021)** examined how the brain memory system is affected by early adverse experiences and how it changes over time. A group of adolescents with documented childhood maltreatment (n=19; age = 10-14; 42% female; 79% Caucasian) and a group without documented childhood maltreatment (n= 18; age= 10-14; 56% female; 50% Caucasian) recalled personal memories while their brain activity was being measured. Each adolescent took part in two brain scans, two years apart, to track developmental changes. The researchers found that atypical hippocampus activation (a brain region involved in the storage and recollection of personal memories) among young people with a history of maltreatment normalised over time. On the other hand, the retrosplenial cortex (a brain region also important for recollection of memories) became more active over time in young people with maltreatment experiences, as compared to peers without maltreatment experiences. This brain change was associated with improved psychological functioning in children with a history of abuse or neglect. In sum, preliminary evidence suggests that changes in the brain memory system following early adversity are not fixed, and may normalise and show adaptive changes during development.

Puetz, V. B., Viding, E., Maguire, E. A., Mechelli, A., Armbruster-Genç, D., Sharp, M., Rankin, G., Gerin, M. I., & McCrory, E. J. (2021). Functional brain plasticity following childhood maltreatment: A longitudinal fMRI investigation of autobiographical memory processing. *Development and Psychopathology*, 1–8. Advance online publication. https://doi.org/10.1017/S0954579421001292



Violence-related changes in the brain threat system are influenced by the quality of maternal caregiving and the context of trauma

In this study, **Stevens and colleagues (2021)** examined the interaction between brain threat responses, mental health symptoms, early adversity and experimentally measured maternal warmth. While brain activity was being measured, 53 African American children at high risk of violence exposure (age 8-14; 51% female) passively viewed neutral and fearful faces (a social cue of potential danger). The researchers found that children who experienced greater violence at home showed increased amygdala activation (a region that is essential for detecting threats). This, in turn, was linked to more externalising mental health symptoms (such as hyperactivity, aggression, and conduct problems). However, maternal warmth (the expression of positive emotions toward the child) was linked with less amygdala activity and less externalising behaviour at a one-year follow-up. Moreover, children exposed to more school and community violence showed greater amygdala habituation - that is, a more marked decrease in neural responses with repeated presentation of threat stimuli. In sum, the presence of warm maternal caregiving can protect against violence-related brain alterations and future poor mental health outcomes.

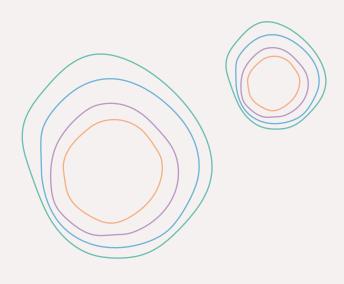
Stevens, J. S., van Rooij, S., Stenson, A. F., Ely, T. D., Powers, A., Clifford, A., Kim, Y. J., Hinrichs, R., Tottenham, N., & Jovanovic, T. (2021). Amygdala responses to threat in violence-exposed children depend on trauma context and maternal caregiving. *Development and Psychopathology*, 1–12. Advance online publication. https://doi.org/10.1017/S0954579421001085

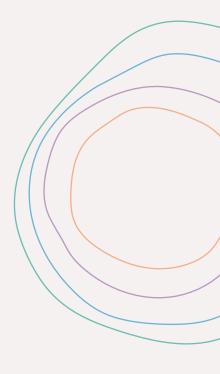


The importance of caregiving quality among young people with a history of childhood maltreatment

In this study, **Sullivan and colleagues (2021)** explored the interaction between startle response (an involuntary fight-or-flight physiological reaction to cues of potential danger), quality of current parenting, and PTSD symptoms among a group of young people with a history of childhood maltreatment (n = 66; 18-20 years old; 77.3% cisgender woman, 16% cisgender man, 12% transgender; 89% non-Hispanic White, 4.5% Latino, 4.5% African American, 3% Asian American). The researchers found that elevated PTSD symptoms were associated with a more pronounced startle response during a fear-learning experimental task. However, positive parenting (e.g., parenting characterised by higher levels of warm and autonomypromoting behaviours) was associated with reduced startle response among participants with elevated PTSD symptoms. In sum, young people with childhood maltreatment histories and high levels of PTSD, who receive current positive caregiving, show less pronounced physiological reactivity to danger than youth lacking that support.

Sullivan, A., Brier, Z., Legrand, A. C., van Stolk-Cooke, K., Jovanovic, T., Norrholm, S. D., Garavan, H., Forehand, R., & Price, M. (2021). The enduring importance of parenting: Caregiving quality and fear-potentiated startle in emerging adults with a child maltreatment history. *Child Maltreatment*, 10775595211060050. Advance online publication. https://doi.org/10.1177/10775595211060050









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